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PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth here in.

Operating Permit Number:

Expiration Date:

Installation ID: 183-0010183-0010183-0010

Project Number: 2002-12-0502002-12-0502002-12-050

Installation Name and Address

McDonnell Douglas Corporation, a wholly-owned subsidiary
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Installation Description:

The Boeing Company designs, develops, manufactures, integrates and supports a variety of aerospace and defense products. These include military and commercial aircraft, helicopters, missiles, space launch vehicles and other space systems, and sensing systems.

Effective Date

Director or Designee
Department of Natural Resources

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

The Boeing Company designs, develops, manufactures, integrates and supports a variety of aerospace and defense products. These include military and commercial aircraft, helicopters, missiles, space launch vehicles and other space systems, and sensing systems.

Reported Air Pollutant Emissions, tons per year

Year	Particulate Matter (PM-10)	Sulfur Oxides	Nitrogen Oxides	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAP's)
1996	3.88	0.03	4.96	19.58	1.04	0	0.74
1997	3.08	0.03	4.99	0.90	1.11	0	0.04
1998	2.93	0.01	3.83	15.82	0.85	0	0.08
1999	2.82	0.01	3.06	9.92	2.35	0	0.08
2000	2.64	0.17	2.50	9.96	2.41	0	0.001
2001	2.99	0.02	2.96	13.4	2.96	0	0

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation which emit air pollutants and which are identified as having unit-specific emission limitations.

Emission Unit #	Description of Emission Unit (EIQ Reference)
EU0020	Cold Cleaners (CC-STC-02)
EU0030	Spray Gun Cleaners (CC-STC-03)
EU0060	Coating Lines (CL-STC-01)
EU0070	Coating Lines (CL-STC-01)
EU0080	Coating Lines (CL-STC-01)
EU0090	Coating Lines (CL-STC-01)
EU0100	Coating Lines (CL-STC-01)
EU0110	Coating Lines (CL-STC-01)
EU0120	Bench Spray Booth (CL-STC-01)
EU0140	Mixing Touch-Up Paint Booth (CL-STC-01)
EU0160	Combustion Source (CS-STC-01)
EU0170	Combustion Source (CS-STC-01)
EU0180	Combustion Source (CS-STC-01)
EU0190	Combustion Source (CS-STC-01)
EU0200	Combustion Source (CS-STC-01)
EU0210	Combustion Source (CS-STC-01)

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EU0220	Combustion Source (CS-STC-01)
EU0230	De-painting Operation (MC-STC-01)
EU0240	De-painting Operation (None)
EU0260	Emergency Generator (None)
EU0280	Emergency Generator (None)
EU0290	Emergency Generator (None)
EU0300	Emergency Generator (None)
EU0310	Emergency Generator (None)
EU0320	Emergency Generator (None)
EU0340	Fuel Storage Tank (ST-STC-01)
EU0360	Fuel Storage Tank (ST-STC-01)
EU0370	Vapor Degreasers (VD-598-01)
EU0380	Natural Gas Coating Oven (CL-STC-01)
EU0390	Natural Gas Coating Oven (CL-STC-01)
EU0410	Natural Gas Fired Indirect Heating Units (Existing) (CS-STC-01)
EU0420	Natural Gas Fired Indirect Heating Units (Existing) (CS-STC-01)
EU0430	Natural Gas Fired Indirect Heating Units (Existing) (CS-STC-01)
EU0440	Natural Gas Fired Indirect Heating Units (Existing) (CS-STC-01)
EU0450	Natural Gas Fired Indirect Heating Units (Existing) (CS-STC-01)
EU0460	Natural Gas Fired Indirect Heating Units (Existing) (CS-STC-01)
EU0470	Natural Gas Fired Indirect Heating Units (New) (CS-STC-01)
EU0480	Natural Gas Fired Indirect Heating Units (New) (CS-STC-01)
EU0490	Natural Gas Fired Indirect Heating Units (New) (CS-STC-01)
EU0500	Natural Gas Fired Indirect Heating Units (New) (CS-STC-01)
EU0510	Natural Gas Fired Indirect Heating Units (New) (CS-STC-01)
EU0520	Natural Gas Fired Indirect Heating Units (New) (CS-STC-01)
EU0530	Natural Gas Fired Indirect Heating Units (New) (CS-STC-01)
EU0590	Adhesives and Sealant

EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

Description of Emission Source

500 Gallon Storage Tank
5 Radiant Heaters (Shipping Dock) (0.05 MMBTU/hr each)
AHU #11 Fan (Room 4)
AHU #12 Fan (Room 5)
I. AHU #13 Fan (Room 6)
AHU #16 Fan (Room 7)
AHU #17 Fan (Room 8)

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AHU #19 Fan (Room 9)
AHU #21 Fan (Room 10)
RTU-#42
RTU-#43
RTU-#44
AHU #37 Fan (Room 2)
AHU #40 Fan (Room 2)
AHU #82 – Kitchen Fan (Room 2)
Roof Top Unit #35 (Insp/Receiving)
Roof Top Unit #36 (Lower Mezzanine)
Roof Top Unit #41 (Personnel)
Roof Top Unit #51 (Computer Room & Library)
Roof Top Unit #52 (CAAD)
Roof Top Unit #53 (Vital High Tech)
Unit Heater (N. Attic & Shop Chute)
Unit Heater (North Attic)
Unit Heater (S. Equip Room)
Unit Heater (Walkway)
Unit Heater (Old PWB)
Unit Heater (South Restroom)
AHU #24-6 Conformal Coat
Water Heater (Jackson)(HUD)
Water Heater (PWB & Engineering)
Water Heater (Tele-Laars, Rm 62)
Water Heater (A.O. Smith, Rm 273)
Water Heater Rheem (Rm 291)
Abrasive Media Blaster
Cooling Towers
6 Roof Top Units (62-67), Machine Shop (0.85 MMBTU/hr ea.)
Roof Top Unit 34 (Vital Engineering)
Roof Top Unit 45 (Vital Engineering)
Roof Top Unit 68 (Computer Maintenance)
Roof Top Unit 54 (Vital Engineering)
Fire Pump House Boiler
2 Roof Top Units (1 and 2)(0.275 MMBTU/hr ea.)
Roof Top Unit 3
2 Roof Top Units (4 and 5)(0.125 MMBTU/hr ea.)
Roof Top Unit 6
Unit Heater_
AHU (A Section of Building)
Water Heater (A Section of Building)

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Water Heater (B Section of Building)

Duct Heaters

Unit Heater (Auto Repair Shop)

Water Heater (C Section & Café)

Water Heater (D Section of Building)

Unit Heater Renzor

Unit Heater Renzor

Unit Heater Renzor

Water Heater

Space Heater Renzor

3 Space Heaters (0.65 MMBTU/hr -ea.)

Water Heater

2 Drying Ovens (0.8 MMBTU/hr ea.)

2 Natural Gas/Fuel Oil Cleaver Brooks Boilers (5.23 MMBTU/hr ea.)

Cleaver Brooks Standby Boiler

DOCUMENTS INCORPORATED BY REFERENCE

These documents have been incorporated by reference into this permit.

- 1) Construction Permit No. 0683-002
- 2) Construction Permit No. 1189-013
- 3) Construction Permit No. 0186-006A
- 4) Construction Permit No. 0487-014
- 5) Construction Permit No. 1187-001A
- 6) Construction Permit No. 0991-002
- 7) Construction Permit No. 0792-0003
- 8) Construction Permit No. 1292-016
- 9) Construction Permit No. 0294-019
- 10) Construction Permit No. 0195-020
- 11) Construction Permit No. 0396-014
- 12) Construction Permit No. 0396-014A
- 13) Construction Permit No. 0997-007
- 14) Construction Permit No. 0396-022
- 15) Construction Permit No. 0396-014A

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II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

Permit Condition PW001

10 CSR 10-6.170

Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

Emission Limitation:

- The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line or origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director; or
- The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
- Should the director determine that noncompliance with the Emission Limitation has occurred, the director may require reasonable control measures as may be necessary.

Monitoring:

The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If a violation of this regulation is discovered, the source shall undertake corrective action to eliminate the violation. Observations of visible fugitive particulate matter emissions from the installation must be made once per month. If monthly observations identify visible fugitive particulate matter emissions from the installation in the ambient air beyond the facility property line, then the following monitoring schedule must be maintained:

- Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then-
- Observations must be made once every two weeks for a period of eight (8) weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
- Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.

If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

Record Keeping:

A log must be maintained noting the following:

- Whether fugitive particulate matter air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
- Whether the visible particulate matter air emissions were normal for the installation.
- Equipment malfunctions that could cause an exceedance of 10 CSR 10-6.170.
- Any violations of 10 CSR 10-6.170 and any corrective actions undertaken to correct the violation.

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Attachment A contains a log including these record keeping requirements. This log (written or electronic), or an equivalent created by the permittee (written or electronic), must be used to certify compliance with this requirement.

Reporting:

The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

Permit Condition PW002

10 CSR 10-6.220

Restriction of Emissions of Visible Air Contaminants

Emission Limitation:

The permittee shall not discharge into the ambient air from any single existing source of emission whatsoever any air contaminant of an opacity greater than 20%.

Existing sources in the St. Louis metropolitan area that are not incinerators and emit less than twenty-five (25) lbs/hr of particulate matter shall be limited to forty percent (40%) opacity.

Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any sixty (60) minutes air contaminants with an opacity up to 40%.

Monitoring:

- The permittee shall conduct opacity readings on this emission unit using the procedures contained in USEPA Test Method 22. At a minimum the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation using a certified Method 9 observer.
- The following monitoring schedule must be maintained:
 1. Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance. Please note: The monitoring frequency shall commence from the initial operating permit monitoring frequency unless an exceedance has been observed. Should no violation of this regulation be observed during this period then-
 2. Observations must be made once every two weeks for a period of eight (8) weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
 3. Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.
- If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

Record Keeping:

- The permittee shall maintain records (written or electronic) of all observation results (see Attachments B and C), noting:

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1. Whether any air emissions (except for water vapor) were visible from the emission units,
 2. All emission units from which visible emissions occurred, and
 3. Whether the visible emissions were normal for the process.
- The permittee shall maintain records (written or electronic) of any equipment malfunctions that cause an exceedance of this regulation.
 - The permittee shall maintain records (written or electronic) of any USEPA Method 9 opacity test (see Attachment D) performed in accordance with this permit condition.

Reporting:

The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of the opacity limit established by 10 CSR 10-6.220, or any malfunction which causes an exceedance of this regulation.

Permit Condition PW003

10 CSR 10-5.450

Control of VOC Emissions from Traffic Coatings

Emission Limitation:

- The permittee shall not supply, sell, offer for sale, apply, or solicit the application of, any traffic coating which, at the time of sale or manufacture, contains more than 150 grams of VOCs per liter of coating (1.26 pounds per gallon), excluding water, exempt compounds, and any colorant added to tint bases, or manufacture, blend, or repackage such a coating for use within the St. Louis metropolitan area without the approval of the staff director.
- If anywhere on the container of any coating, on any sticker or label affixed thereto, or in any sales or advertising literature, any representation is made that the coating may be used as, or is suitable for use as, a coating for which a lower VOC is specified, then the lowest VOC standard shall apply.
- All VOC-containing materials shall be stored in closed containers when not in use. In use includes, but is not limited to, being accessed, filled, emptied, or repaired.

Monitoring:

The permittee shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coating or from data determined by an analysis of each coating, as received, by EPA Reference Method 24.

Record Keeping:

- Records shall be retained for a minimum of five years.
- Material Safety Data Sheets (MSDS), purchasing records or data analysis showing the VOC content of the traffic coatings used will be kept.
- These records shall be made available to the Air Pollution Control Program immediately upon request.

Reporting:

The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of the opacity limit established by 10 CSR 10-6.220, or any malfunction which causes an exceedance of this regulation.

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Permit Condition PW004

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart GG

National Emission Standards for Aerospace Manufacturing and Rework Facilities

40 CFR Part 63, Subpart A

General Provisions

10 CSR 10-5.295

Control of Emissions from Aerospace Manufacturing and Rework Facilities

Emission Limitation/Operational Limitation:

For the entire Cleaning/Hand Wipe activities that occur plant-wide, the permittee shall:

A. Housekeeping measures –

(a) The permittee shall institute and carry out a housekeeping program that requires the following:

1. Place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton-tipped swabs used for very small cleaning are exempt from this requirement. (§63.744(a)(1))
2. Store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers. (§63.744(a)(2))
3. Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills. (§63.744(a)(3))

(b) As part of the program required by (a) above, permittee shall conduct quarterly audits for handwipe cleaning operations to determine whether the specified work practices are being followed. During each audit, permittee shall document any observed instance where the specified work practices are not being followed and shall provide for prompt correction. Within one week, the permittee shall re-audit any area where a previous audit documented an observed instance where the specified work practices were not being followed.

B. Hand-wipe cleaning

1. The permittee shall use cleaning solvents that meet one of the following requirements:

- a. Meet (1) one of the composition requirements in Table 1 of §63.744. (§63.744(b)(1))
- b. Have a composite vapor pressure of 45-mm Hg (24.1 in. H₂O) or less at 20° Celsius. (68° Fahrenheit). (§63.744(b)(2))
- c. Demonstrate that the volume of hand-wipe cleaning solvents used in affected cleaning operations has been reduced by at least 60% from a baseline adjusted for production. The baseline shall be established as part of an approved alternative plan administered by the State. (§63.744(b)(3))

C. Cleaning Operations - Each cleaning operation subject to this subpart shall be considered in noncompliance if the permittee fails to institute and carry out the housekeeping measures required under §63.744(a). Incidental emissions resulting from the activation of pressure release vents and valves on enclosed cleaning systems are exempt from this paragraph. (§63.749(c))

D. Flush Cleaning - For each aerospace manufacturing and/or rework operation that includes a flush cleaning operation, permittee shall empty the used cleaning solvents each time aerospace parts or assemblies, or components of a coating unit with the exception of spray guns are flush cleaned into an enclosed container or collection system that is kept closed when not in use or into a system with equivalent emission control approved by the director. Aqueous, semi-aqueous, and low vapor pressure hydrocarbon based solvent materials are exempt from the requirements of this subsection

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(ii) For those wastes subject to 40 CFR Part 63, Subpart GG, failure to comply with the requirements specified in §63.748 shall be considered a violation. (§63.749(i))

Monitoring:

- Compliance with the hand-wipe cleaning solvent approved composition list specified in § 63.744(b)(1) for hand-wipe cleaning solvents shall be demonstrated using data supplied by the manufacturer of the cleaning solvent. The data shall identify all components of the cleaning solvent and shall demonstrate that one of the approved composition definitions is met. (§63.750(a))
- The composite vapor pressure of hand-wipe cleaning solvents used in a cleaning operation subject to this subpart shall be determined as follows: (§63.750(b))
 1. For single-component hand-wipe cleaning solvents, the vapor pressure shall be determined using MSDS or other manufacturer's data, standard engineering reference texts, or other equivalent methods. (§63.750(b)(1))
 2. The composite vapor pressure of a blended hand-wipe solvent shall be determined by quantifying the amount of each organic compound in the blend using manufacturer's supplied data or a gas chromatographic analysis in accordance with ASTM E 260-91 (incorporated by reference as specified in § 63.14 of subpart A of this part) and by calculating the composite vapor pressure of the solvent by summing the partial pressures of each component. The vapor pressure of each component shall be determined using manufacturer's data, standard engineering reference texts, or other equivalent methods. The following equation shall be used to determine the composite vapor pressure: (§63.750(b)(2))

$$PP_c = \frac{\sum_{i=1}^n \frac{(W_i)(VP_i) / MW_i}{\frac{W_w}{MW_w} + \sum_{e=1}^n \frac{W_e}{MW_e} + \sum_{i=1}^n \frac{W_i}{MW_i}}$$

Where:

W_i = Weight of the "i"th VOC compound, grams.

W_w = Weight of water, grams.

W_e = Weight of non-HAP, nonVOC compound, grams.

MW_i = Molecular weight of the "i"th VOC compound, g/g-mole.

MW_w = Molecular weight of water, g/g-mole.

MW_e = Molecular weight of exempt compound, g/g-mole.

PP_c = VOC composite partial pressure at 20 °C, mm Hg.

VP_i = Vapor pressure of the "i"th VOC compound at 20 °C, mm Hg. (§63.750(b))

Record Keeping:

- The permittee shall fulfill all recordkeeping requirements in §63.10 (a), (b), (d), and (f). Please see Appendix B for these recordkeeping requirements. (§63.752(a))
- The permittee shall record the information specified below: (§63.752(b))
 1. The name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility. (§63.752(b)(1))
Use Attachment G (written or electronic), or an equivalent form created by the permittee (written or

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electronic), for the purpose of this Record Keeping requirement.

2. For each cleaning solvent used in hand-wipe cleaning operations that complies with the composition requirements in §63.744(b)(1) or for semi-aqueous cleaning solvents used for flush cleaning operations: (§63.752(b)(2))
 - a. The name of each cleaning solvent used; (§63.752(b)(2)(i))
 - b. All data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements; and (§63.752(b)(2)(ii))
 - c. Annual records of the volume of each solvent used, as determined from facility purchase records or usage records. (§63.752(b)(2)(iii))
- For each cleaning solvent used in hand-wipe cleaning operations that does not comply with the composition requirements in §63.744(b)(1), but does comply with the vapor pressure requirement in §63.744(b)(2): (§63.752(b)(3))
 1. The name of each cleaning solvent used; (§63.752(b)(3)(i))
 2. The composite vapor pressure of each cleaning solvent used; (§63.752(b)(3)(ii))
 3. All vapor pressure test results, if appropriate, data, and calculations used to determine the composite vapor pressure of each cleaning solvent; and (§63.752(b)(3) (§63.752(b)(2)(iii))
 4. The amount (in gallons) of each cleaning solvent used each month at each operation. (§63.752(b)(3)(iv))
- For each cleaning solvent used for exempt hand-wipe cleaning operations specified in §63.744(e) that does not conform to the vapor pressure or composition requirements of §63.744(b): (§63.752(b)(4))
 1. The identity and amount (in gallons) of each cleaning solvent used each month at each operation; and (§63.752(b)(4)(i))
 2. A list of the processes set forth in §63.744(e) to which the cleaning operation applies (§63.752(b)(4)(ii))
- Each owner or operator of an aerospace manufacture and/or rework operation that uses cleaning solvents subject to this rule shall:
 1. Maintain a list of materials with corresponding water contents for aqueous and semi-aqueous hand-wipe cleaning solvents;
 2. Maintain a current list of cleaning solvents in use with their respective vapor pressure or, for blended solvents, VOC composite vapor pressure for all vapor pressure compliant hand-wipe cleaning solvents. This list shall include the monthly amount of each applicable solvent used; and
 3. Maintain a current list of exempt hand-wipe cleaning processes for all cleaning solvents with a vapor pressure greater than 45 mm Hg used in exempt hand-wide cleaning operations. This list shall include the monthly amount of each applicable solvent used.
- Records of the monthly inspections will be maintained.

Use Attachment I (written or electronic), or an equivalent form created by the installation (written or electronic), for the Record Keeping requirements of this regulation.

Reporting:

- The permittee shall submit the following information: (§63.753(b))
 1. Semiannual reports occurring every six (6) months from the date of the notification of compliance status that identify: (§63.753(b)(1))
 - a. Any instance where a non-compliant cleaning solvent is used for a nonexempt hand-wipe cleaning operation; (§63.753(b)(1)(i))
 - b. A list of any new cleaning solvents used for hand-wipe cleaning in the previous six (6) months and, as appropriate, their composite vapor pressure or notification that they comply with the composition requirements specified in §63.744(b)(1); (§63.753(b)(1)(ii))

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- c. If the operations have been in compliance for the semiannual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements. (§63.753(b)(1)(v))
- The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

Permit Condition PW005

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart JJ

National Emission Standards for Hazardous Air Pollutants for Wood Furniture Manufacturing Operations

40 CFR Part 63, Subpart A

General Provisions

Emission Limitation:

- The permittee shall maintain purchase or usage records demonstrating the source meets the definition of incidental wood manufacturing of 40 CFR Part 63, Subpart JJ, but the source shall not be subject to any other provisions of this subpart. (§63.800(a))
- The permittee shall not use more than 100 gallons per month of finishing material or adhesives in the manufacture of wood furniture or wood furniture components.

Monitoring/Record Keeping:

The permittee shall maintain purchase or usage records demonstrating that the source uses no more than 100 gallons per month of finishing material or adhesives in the manufacture of wood furniture or wood furniture components.
(§63.800(a))

Reporting:

The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation.

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III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

EU0020 Cold Cleaners

General Description:	EU0020 Cold Cleaners Emission Unit #CC-505-01
Manufacturer/Model #:	N/A
EIQ Reference # (2001):	EP#CC-STC-01

Permit Condition EU0020-001

10 CSR 10-5.300

Control of Emissions from Solvent Metal Cleaning

Emission Limitation/ Equipment Specification:

- Each cold cleaner shall have a cover which will prevent the escape of solvent vapors from the solvent bath while in the closed position or an enclosed reservoir which will limit the escape of solvent vapors from the solvent bath whenever parts are not being processed in the cleaner.
- When one or more of the following conditions exist, the design of the cover shall be such that it can be easily operated with one hand such that minimal disturbing of the solvent vapors in the tank occurs. (For covers larger than ten square feet, this shall be accomplished by either mechanical assistance such as spring loading or counter weighing or by power systems):
 - The solvent vapor pressure is greater than 0.3 psi measured at thirty-seven point eight degrees Celsius (37.8°C) (one hundred degrees Fahrenheit (100°F)), such as in mineral spirits.
 - The solvent is agitated, or
 - The solvent is heated.
- Each cold cleaner shall have a drainage facility which will be internal so that parts are enclosed under the cover while draining.
- If an internal drainage facility cannot fit into the cleaning system and the solvent vapor pressure is less than 0.6 psi measured at thirty-seven point eight degrees Celsius (37.8°C) (one hundred degrees Fahrenheit (100°F)), then the cold cleaner shall have an external drainage facility which provides for the solvent to drain back into the solvent bath.
- Solvent sprays, if used, shall be a solid fluid stream (not a fine, atomized or shower-type spray) and at a pressure which does not cause splashing above or beyond the freeboard.
- A permanent conspicuous label summarizing the operating procedures shall be affixed to the equipment.

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7. Any cold cleaner which uses a solvent that has a solvent vapor pressure greater than 0.6 psi measured at thirty-seven point eight degrees Celsius (37.8/C) (one hundred degrees Fahrenheit (100/F)) or heated above forty-eight point nine degrees Celsius (48.9/C) (one hundred twenty degrees Fahrenheit (120/F)) must use one (1) of the following control devices:
- A freeboard ratio of at least 0.75;
 - Water cover (solvent must be insoluble in and heavier than water); or
 - Other control systems with a mass balance demonstrated overall VOC emissions reduction efficiency greater than or equal to sixty-five percent (65%). These control systems must receive approval from the director prior to their use.

Operation Limitation:

Each cold cleaner shall be operated as follows:

- Cold cleaner covers shall be closed whenever parts are not being handled in the cleaners or the solvent must drain into an enclosed reservoir.
- Cleaned parts shall be drained in the freeboard area for at least fifteen (15) seconds or until dripping ceases, whichever is longer.
- Whenever a cold cleaner fails to perform within the operating parameters established for it by this regulation, the unit shall be shut down immediately and shall remain shut down until trained service personnel are able to restore operation within the established parameters.
- Solvent leaks shall be repaired immediately or the degreaser shall be shut down until the leaks are repaired.
- Any waste material removed from a cold cleaner shall be disposed of by one (1) of the following methods and in accordance with the Missouri Hazardous Waste Management Commission rules codified at 10 CSR 10-25, as applicable:
 - Reduction of the waste material to less than twenty percent (20%) VOC solvent by distillation and proper disposal of the still bottom waste, or
 - Stored in closed containers for transfer to a contract reclamation service or a disposal facility approved by the director.
- Waste solvent shall be stored in covered containers only.

Operators must be trained as follows:

- Only persons trained in at least the operational and equipment requirements specified in this regulation for their particular solvent metal cleaning process shall be permitted to operate the equipment,
- The supervisor of any person who operates a solvent metal cleaning process shall receive equal or greater operational training than the operator,
- Refresher training shall be given to all solvent metal cleaning equipment operators at least once each twelve (12) month period.

Monitoring:

The permittee shall monitor the throughputs of the solvents monthly and maintain material safety data sheets of the cleanup solvents used at the installation.

Record Keeping:

The permittee shall keep monthly inventory records of solvent types and amounts purchased and solvent consumed for a period of five years. The records shall include all types and amounts of solvent containing waste material transferred to either a contract reclamation service or to a disposal installation and all amounts distilled on the premises. The record also shall include maintenance and repair logs.

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Records shall be maintained of all solvent metal cleaning training for each employee for a period of five years.

Reporting:

The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of 10 CSR 10-5.300 demonstrated by the appropriate record keeping forms.

Permit Condition (EU0020)-002

10 CSR 10-6.060

Construction Permits Required

Construction Permit #0396-014

Emission Limitation:

The total combined emissions of volatile organic compounds (VOCs) from the operation of Emission Unit EU0020 shall be limited to 12.2. tons in any consecutive 12-month period. (Special Condition 1)

Monitoring/Record Keeping:

Use Attachment F (written or electronic), or an equivalent form created by the permittee (written or electronic), for the most recent five year period of operation that show the tons of VOC emitted from EU0020. All emissions shall be calculated using material mass balance based on 100% VOC content of the solvent used. The records shall contain both the monthly and 12-month totals. These records shall be made available to the Department of Natural Resources personnel upon request. (Special Condition 2)

Reporting:

The permittee shall report to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of each month, if the 12-month cumulative total (Monitoring/Record Keeping requirement) records show that the source exceeded the Emission Limitation of this Permit Condition. (Special Condition 3)

EU0030

Spray Gun Cleaners

General Description:	EU0030 Spray Gun Cleaning Operations Emission Unit #CC-598-05
Manufacturer/Model #:	N/A
EIQ Reference # (???):	EP#CC-STC-01

Permit Condition EU0030-001

10 CSR 10-5.300

Control of Emissions from Solvent Metal Cleaning

Emission Limitation/ Equipment Specification:

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1. Each cold cleaner shall have a cover which will prevent the escape of solvent vapors from the solvent bath while in the closed position or an enclosed reservoir which will limit the escape of solvent vapors from the solvent bath whenever parts are not being processed in the cleaner.
2. When one or more of the following conditions exist, the design of the cover shall be such that it can be easily operated with one hand such that minimal disturbing of the solvent vapors in the tank occurs. (For covers larger than ten square feet, this shall be accomplished by either mechanical assistance such as spring loading or counter weighing or by power systems):
 - a. The solvent vapor pressure is greater than 0.3 psi measured at thirty-seven point eight degrees Celsius (37.8°C) (one hundred degrees Fahrenheit (100°F)), such as in mineral spirits.
 - b. The solvent is agitated, or
 - c. The solvent is heated.
3. Each cold cleaner shall have a drainage facility which will be internal so that parts are enclosed under the cover while draining.
4. If an internal drainage facility cannot fit into the cleaning system and the solvent vapor pressure is less than 0.6 psi measured at thirty-seven point eight degrees Celsius (37.8°C) (one hundred degrees Fahrenheit (100°F)), then the cold cleaner shall have an external drainage facility which provides for the solvent to drain back into the solvent bath.
5. Solvent sprays, if used, shall be a solid fluid stream (not a fine, atomized or shower-type spray) and at a pressure which does not cause splashing above or beyond the freeboard.
6. A permanent conspicuous label summarizing the operating procedures shall be affixed to the equipment.
7. Any cold cleaner which uses a solvent that has a solvent vapor pressure greater than 0.6 psi measured at thirty-seven point eight degrees Celsius (37.8°C) (one hundred degrees Fahrenheit (100°F)) or heated above forty-eight point nine degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)) must use one (1) of the following control devices:
 - a. A freeboard ratio of at least 0.75;
 - b. Water cover (solvent must be insoluble in and heavier than water); or
 - c. Other control systems with a mass balance demonstrated overall VOC emissions reduction efficiency greater than or equal to sixty-five percent (65%). These control systems must receive approval from the director prior to their use.
8. Spray gun cleaning. Each owner or operator of a manufacturing and/or rework operation shall clean spray guns used in the application of (and not limited to) primers, paint, specialty coatings, adhesives, sealers, resins and deadeners utilizing one (1) or more of the following techniques:
 - a. Enclosed system spray gun cleaning shall consist of forcing solvent through the gun. Spray gun cleaning machines used to clean spray guns with the exception of remote open top spray gun cleaning machines shall be exempt from the requirements of parts (3)(B)1.A.(I) and (3)(B)1.B.(I) of 10 CSR 10-5.300. Spray guns and nozzles only may be cleaned in remote closed top spray gun cleaning machines containing solvent-based materials capable of cleaning, provided the removable clean and spent solvent containers (not to exceed thirty (30) gallons in size) are kept tightly closed or covered at all times except when being accessed or maintained. All remote spray gun cleaning machines shall be operated within the manufacturers specifications. All remote closed top spray gun cleaning machines shall not be operated unless the cover is closed and shall be closed or covered when not in use;
 - b. Nonatomized cleaning shall be exempt from the requirements of parts (3)(B)1.A.(I) (3)(B)1.B.(I) of 10 CSR 10-5.300. Spray guns shall be cleaned by placing cleaning solvent in the pressure pot and forcing it through the gun with the atomizing cap in place. No atomizing air is to be used. The cleaning solvent from the spray gun shall be directed into (and not limited to) a pail, bucket, drum, or other waste

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- container that is closed when not in use;
- c. Disassembled spray gun cleaning shall be exempt from the requirements of parts (3)(B)1.A.(I) and (3)(B)1.B.(I) of 10 CSR 10-5.300. Spray guns shall be cleaned by disassembling and cleaning the components by hand in a cold cleaner, which shall remain closed at all times except when in use. Alternatively, the components shall be soaked in a cold cleaner, which shall remain closed during the soaking period and when not inserting or removing components;
 - d. Atomizing cleaning shall be exempt from the requirements of parts (3)(B)1.A.(I) and (3)(B)1.B.(I) of 10 CSR 10-5.300. Spray guns shall be cleaned by forcing the cleaning solvent through the gun and directing the resulting atomized spray into a waste container that is fitted with a device designed to capture the atomized cleaning solvent emissions; and
 - e. Cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems that can be programmed to spray into a closed container, shall be exempt from the requirements of part (3)(B)1.D.(X).

Operation Limitation:

Each cold cleaner shall be operated as follows:

- 1. Cold cleaner covers shall be closed whenever parts are not being handled in the cleaners or the solvent must drain into an enclosed reservoir.
- 2. Cleaned parts shall be drained in the freeboard area for at least fifteen (15) seconds or until dripping ceases, whichever is longer.
- 3. Whenever a cold cleaner fails to perform within the operating parameters established for it by this regulation, the unit shall be shut down immediately and shall remain shut down until trained service personnel are able to restore operation within the established parameters.
- 4. Solvent leaks shall be repaired immediately or the degreaser shall be shut down until the leaks are repaired.
- 5. Any waste material removed from a cold cleaner shall be disposed of by one (1) of the following methods and in accordance with the Missouri Hazardous Waste Management Commission rules codified at 10 CSR 10-25, as applicable:
 - a) Reduction of the waste material to less than twenty percent (20%) VOC solvent by distillation and proper disposal of the still bottom waste, or
 - b) Stored in closed containers for transfer to a contract reclamation service or a disposal facility approved by the director.
- 6. Waste solvent shall be stored in covered containers only.

Operators must be trained as follows:

- 1. Only persons trained in at least the operational and equipment requirements specified in this regulation for their particular solvent metal cleaning process shall be permitted to operate the equipment,
- 2. The supervisor of any person who operates a solvent metal cleaning process shall receive equal or greater operational training than the operator,
- 3. Refresher training shall be given to all solvent metal cleaning equipment operators at least once each twelve (12) month period.

Monitoring:

The permittee shall monitor the throughputs of the solvents monthly and maintain material safety data sheets of the cleanup solvents used at the installation.

Record Keeping:

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The permittee shall keep monthly inventory records of solvent types and amounts purchased and solvent consumed for a period of five (5) years. The records shall include all types and amounts of solvent containing waste material transferred to either a contract reclamation service or to a disposal installation and all amounts distilled on the premises. The record also shall include maintenance and repair logs.

Records shall be maintained of all solvent metal cleaning training for each employee for a period of five years.

Reporting:

The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of 10 CSR 10-5.300 demonstrated by the appropriate record keeping forms.

Permit Condition EU0030-002

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart GG

National Emission Standards for Aerospace Manufacturing and Rework Facilities

40 CFR Part 63, Subpart A

General Provisions

10 CSR 10-5.295

Control of Emissions from Aerospace Manufacturing and Rework Facilities

Emission Limitation/Operational Limitation:

- Housekeeping measures:
 - (a) The permittee shall institute and carry out a housekeeping program that requires the following:
 1. Place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton-tipped swabs used for very small cleaning are exempt from this requirement. (§63.744(a)(1))
 2. Store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers. (§63.744(a)(2))
 3. Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills. (§63.744(a)(3))
 - (b) As part of the program required by (a) above, permittee shall conduct quarterly audits for handwipe cleaning operations to determine whether the specified work practices are being followed. During each audit, permittee shall document any observed instance where the specified work practices are not being followed and shall provide for prompt correction. Within one week, the permittee shall re-audit any area where a previous audit documented an observed instance where the specified work practices were not being followed.
- Spray gun cleaning.
 1. The permittee shall use one or more of the techniques, or their equivalent, specified in §63.744(c)(1)-(c)(4). Spray gun cleaning operations using cleaning solvent solutions that contain HAP and VOC below de minimis levels specified in §63.741(f) are exempt from the requirements in §63.744(c)(1)-(c)(4). (§63.744(c))

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- a. Enclosed System. Clean the spray gun in an enclosed system that is closed at all times except when inserting or removing the spray gun. Cleaning shall consist of forcing the cleaning solvent through the gun. If leaks are found during the monthly inspection required in §63.751(a), repairs shall be made as soon as practicable, but no later than 15 days after the leak was found. If the leak is not repaired by the 15th day after detection, the cleaning solvent shall be removed and the enclosed cleaner shall be shut down until the leak is repaired or its use is permanently discontinued. (§63.744(c)(1)(i) and (ii))
- b. Nonatomized cleaning. Clean the spray gun by placing cleaning solvent in the pressure pot and forcing it through the gun with the atomizing cap in place. No atomizing air is to be used. Direct the cleaning solvent from the spray gun into a vat, drum, or other waste container that is closed when not in use. (§63.744(c)(2))
- c. Disassembled spray gun cleaning. Disassemble the spray gun and clean the components by hand in a vat, which shall remain closed at all times except when in use. Alternatively, soak the components in a vat, which shall remain closed during the soaking period and when not inserting or removing components. (§63.744(c)(3))
- d. Atomizing cleaning. Clean the spray gun by forcing the cleaning solvent through the gun and direct the resulting atomized spray into a waste container that is fitted with a device designed to capture the atomized cleaning solvent emissions. (§63.744(c)(4))
- e. Cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems that can be programmed to spray into a closed container, shall be exempt from the requirements of §63.744(c). (§63.744(c)(5))
- Compliance -Cleaning Operations - Each cleaning operation subject to this subpart shall be considered in noncompliance if the permittee fails to institute and carry out the housekeeping measures required under §63.744(a). Incidental emissions resulting from the activation of pressure release vents and valves on enclosed cleaning systems are exempt from this paragraph. (§63.749(c))
- 1. *Spray gun cleaning.* An affected spray gun cleaning operation shall be considered in compliance when each of the following conditions is met: (§63.749(c)(2))
 - a. One of the four techniques specified in §63.744 (c)(1) through (c)(4) is used; (§63.749(c)(2)(i))
 - b. The technique selected is operated according to the procedures specified in §63.744 (c)(1) through (c)(4) as appropriate; and (§63.749(c)(2)(ii))
 - c. If an enclosed system is used, monthly visual inspections are conducted and any leak detected is repaired within 15 days after detection. If the leak is not repaired by the 15th day after detection, the solvent shall be removed and the enclosed cleaner shall be shut down until the cleaner is repaired or its use is permanently discontinued. (§63.749(c)(2)(iii))
- Except as provided in §63.741(e), the owner or operator of each facility subject to 40 CFR Part 63, Subpart GG that produces a waste that contains HAP shall conduct the handling and transfer of the waste to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills. (§63.748)

For those wastes subject to 40 CFR Part 63, Subpart GG, failure to comply with the requirements specified in §63.748 shall be considered a violation. (§63.749(i))”

Monitoring:

Each permittee using an enclosed spray gun cleaner under §63.744(c)(1) shall visually inspect the seals and all other potential sources of leaks associated with each enclosed spray gun cleaner system at least once per month. Each inspection shall occur while the system is in operation. (§63.751(a))

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Record Keeping:

- The permittee shall fulfill all recordkeeping requirements in §63.10 (a), (b), (d), and (f). Please see Appendix B for these recordkeeping requirements. (§63.752(a))
- The permittee shall record the information specified below: (§63.752(b))
 1. The name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility. (§63.752(b)(1))
Use Attachment G (written or electronic), or an equivalent form (written or electronic), for the purpose of this Record Keeping requirement.
 2. A record of all leaks from enclosed spray gun cleaners that includes for each leak found: (§63.752(b)(5))
 - a. Source identification
 - b. Date leak was discovered
 - c. Date leak was repairedUse Attachment H (written or electronic), or an equivalent form (written or electronic), for the purpose of this Record Keeping requirement.
- Each owner or operator of an aerospace manufacture and/or rework operation that uses cleaning solvents subject to this rule shall:
 1. Maintain a list of materials with corresponding water contents for aqueous and semi-aqueous hand-wipe cleaning solvents;
 2. Maintain a current list of cleaning solvents in use with their respective vapor pressure or, for blended solvents, VOC composite vapor pressure for all vapor pressure compliant hand-wipe cleaning solvents. This list shall include the monthly amount of each applicable solvent used; and
 3. Maintain a current list of exempt hand-wipe cleaning processes for all cleaning solvents with a vapor pressure greater than 45 mm Hg used in exempt hand-wide cleaning operations. This list shall include the monthly amount of each applicable solvent used.

Attachment J (written or electronic), or an equivalent form created by the installation (written or electronic), should be used for the Record Keeping requirements of this regulation.

Reporting:

- The permittee shall submit the following information: (§63.753(b))
 1. Semiannual reports occurring every six (6) months from the date of the initial notification of compliance status that identify: (§63.753(b)(1))
 - a. Any instance where a noncompliant spray gun cleaning method is used. (§63.753(b)(1)(iii))
 - b. Any instance where a leaking enclosed spray gun cleaner remains unrepaired and in use for more than fifteen (15) days. (§63.753(b)(1)(iv))
 - c. If the operations have been in compliance for the semiannual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements. (§63.753(b)(1)(v))
- The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

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EU0060 through EU0120
Coating Lines

General Description:

EU0060
Spray Booth
Controlled by Fabric Filter
Emission Unit #SB-598-01

EU0070
Spray Booth
Controlled by Fabric Filter
Emission Unit #SB-598-02

EU0080
Spray Booth
Controlled by Fabric Filter
Emission Unit #SB-598-03

EU0090
Spray Booth
Controlled by Fabric Filter
Emission Unit #SB-598-04

EU0100
Spray Booth
Controlled by Fabric Filter
Emission Unit #SB-598-05

EU0110
Spray Booth
Controlled by Fabric Filter
Emission Unit #SB-599-01

EU0120
Mixing Touch-Up Paint Booth (primer/topcoat)
Controlled by Fabric Filter
Emission Unit #MB-505-01

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Manufacturer/Model #:	N/A
EIQ Reference # (2001):	EP#CL-STC-01 (for EU0060 – EU0130) Control Device # SB598

Permit Condition(EU0060 through EU0120)-001

10 CSR 10-6.060

Construction Permits Required

Construction Permit #0396-022

Emission Limitation:

The total combined emissions of volatile organic compounds (VOCs) from the following emission units shall be limited to 77.95 tons in any consecutive 12-month period: Secret Coating Booths (SB) 598-01 through SB 598-05 inclusive (EU0060 through EU0100, EU0120), SB 599-01(EU0110), and Ovens (OV) 598-01 through OV 598-02 inclusive (EU0380 through EU0390). Other points include a vapor-degreaser VD-598-01(EU0370). (Special Condition 1)

Monitoring/Record Keeping:

Records (see example: Attachment E) shall be kept on for the most recent 5-year period of plant operation. The records shall contain both the monthly and 12-month totals. These records shall be made available to Department of Natural Resources personnel upon request. (Special Condition 2)

Reporting:

The source shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of each month, if the 12-month cumulative total (Monitoring/Record Keeping) records show that the source exceeded the limitation of the Emission Limitation. (Special Condition 3)

Permit Condition (EU0060 through EU0120)-002

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart GG

National Emission Standards for Aerospace Manufacturing and Rework Facilities

40 CFR Part 63, Subpart A

General Provisions

10 CSR 10-5.295

Control of Emissions from Aerospace Manufacturing and Rework Facilities

Emission Limitation:

1. VOC Limits:

- a. VOC emissions from primers shall be limited to a VOC content level of no more than 350 grams per liter (2.9 pounds per gallon) of primer (less water and exempt solvent) as applied. (§63.745(c)(2))
- b. VOC emissions from topcoats shall be limited to a VOC content level of nor more than 420 grams per liter

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- (3.5 pound per gallon) of self-priming topcoat (less water and exempt solvent) as applied. (§63.745(c)(4))
- c. The VOC content limits listed in Appendix A (Table 1 of 10 CSR 5.295) expressed in pounds per gallon of coating, excluding water and exempt solvent, delivered to a coating applicator that applies specialty coatings.
2. **Organic HAP Limits:**
- a. Organic HAP emissions from primers shall be limited to an organic HAP content level of no more than 350 grams per liter (2.9 pound per gallon) of primer (less water), as applied. (§63.745(c)(1))
- b. Organic HAP emissions from topcoats shall be limited to an organic HAP content level of no more than 420 grams per liter (2.9 pounds per gallon) of self-priming topcoat as applied. (§63.745(c)(3))
3. **Compliance Methods.**
- a. Compliance with the organic HAP and VOC content limits specified in paragraphs (c)(1) through (c)(4) of §63.745 shall be accomplished by using the following methods either by themselves or in conjunction with one another. (§63.745(e))
- Use primers and topcoats (including self-priming topcoats) with HAP and VOC content levels equal to or less than the limits specified in paragraphs (c)(1) through (c)(4) of §63.745. (§63.745(e)(1))
- Use the averaging provisions described in §63.743(d) below: (§63.745(e)(2))
- Instead of complying with the individual coating limits in §63.745, a facility may choose to comply with the averaging provisions specified in paragraphs (1) through (4) below: (§63.743(d))
- (1) The permittee of an existing source shall use any combination of primers and topcoats (including self-priming topcoats) such that the monthly volume-weighted average organic HAP and VOC contents of the combination of primers and topcoats, as determined in accordance with the applicable procedures set forth in §63.750, complies with the specified content limits in §63.745(c), unless the permitting agency specifies a shorter averaging period as part of an ambient ozone control program. (§63.743(d)(1))
- (2) Averaging is allowed only for uncontrolled primers and topcoats (including self-priming topcoats). (§63.743(d)(2))
- (3) Averaging is not allowed between primers and topcoats (including self-priming topcoats). (§63.743(d)(3))
- (4) Each averaging scheme shall be approved in advance by the permitting agency and adopted as part of the facility's Title V permit. (§63.743(d)(6))
- b. The primer application is considered in compliance when the conditions specified in paragraphs (1) through (3) below are met. Failure to meet any one of the conditions identified in these paragraphs shall constitute noncompliance. (§63.749(d)(3))
- (1) All values of H(i) and H(a) (as determined using the procedures specified in §63.750(c) and (d)) are less than or equal to 350 grams of organic HAP per liter (2.9 lb/gal) of primer (less water) as applied, and all values of G(i) and G(a) (as determined using the procedures specified in §63.750(e) and (f)) are less than or equal to 350 grams of organic VOC per liter (2.9 lb/gal) of primer (less water and exempt solvents) as applied. (§63.749(d)(3)(i))
- (2) (a) Uses an application technique specified in §63.745(f)(1)(i) through (f)(1)(viii); or (§63.749(d)(3)(iii)(A))
- (b) Uses an alternative application technique, as allowed under §63.745(f)(1)(ix), such that the emissions of both organic HAP and VOC for the implementation period of the alternative application method are less than or equal to the emissions generated using HVLP or electrostatic spray application methods as determined using the procedures specified in §63.750(i). (§63.749(d)(4)(iii)(B))
- (3) Operates all application techniques in accordance with the manufacturer's specifications or locally prepared operating procedures, whichever is more stringent. (§63.749(d)(3)(iv))

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- c. The topcoat application operation is considered in compliance when the conditions specified in paragraphs (1) through (2) are met. Failure to meet any of the conditions identified in these paragraphs shall constitute noncompliance. (§63.749(d)(4))
- (1) All values of H(i) and H(a) (as determined using the procedures specified in § 63.750(c) and (d)) are less than or equal to 420 grams organic HAP per liter (3.5 lb/gal) of topcoat (less water) as applied, and all values of G(i) and G(a) (as determined using the procedures specified in § 63.750(e) and (f)) are less than or equal to 420 grams organic VOC per liter (3.5 lb/gal) of topcoat (less water and exempt solvents) as applied. (§63.749(d)(4)(i))
 - (2) (a) Uses an application technique specified in §63.745(f)(1)(i) through (f)(1)(viii); or (§63.749(d)(4)(iii)(A))
(b) Uses an alternative application technique, as allowed under §63.745(f)(1)(ix), such that the emissions of both organic HAP and VOC for the implementation period of the alternative application method are less than or equal to the emissions generated using HVLP or electrostatic spray application methods as determined using the procedures specified in §63.750(i). (§63.749(d)(4)(iii)(B))
 - (3) Operates all application techniques in accordance with the manufacture's specifications or locally prepared operating procedures, whichever is more stringent. (§63.749(d)(4)(iv))
4. *Inorganic HAP emissions – primer and topcoat application operations.*
- a. For each primer or topcoat application operation that emits organic HAP, the operation is in compliance when: (§63.749(e))
 - (1) It is operated according to the requirements specified in §63.745(g)(1) through (g)(3); (§63.749(e)(1))
 - (2) It is shut down immediately whenever the pressure drop or water flow rate is outside the limit(s) established for them and is not restarted until the pressure drop or water flow rate is returned within these limit(s), as required under §63.745(g)(3). (§63.749(e)(2))
 - b. *Inorganic HAPs*– The permittee shall comply with the following applicable requirements: (§63.745(g))
 1. Apply these coatings in a booth or hangar in which air flow is directed downward onto or across the part or assembly being coated and exhausted through one or more outlets. (§63.745(g)(1))
 2. Control the air stream from this operation as follows: (§63.745(g)(2))
 - a. For existing sources (EU0060 through EU0130), the permittee must choose one of the following: (§63.745(g)(2)(i) and (ii))
 - i. Before exhausting it to the atmosphere, pass the air stream through a dry particulate filter system certified using the methods described in §63.750(o) to meet or exceed the efficiency data points in Tables 1 and 2 of §63.745(g); or. (§63.745(g)(2)(i)(A))
 - ii. Before exhausting it to the atmosphere, pass the air stream through a waterwash system that shall remain in operation during all coating application operations; or (§63.745(g)(2)(i)(B))
 - iii. Before exhausting it to the atmosphere, pass the air stream through an air pollution control system that meets or exceeds the efficiency data points in Tables 1 and 2 of §63.745 and is approved by the permitting authority. (§63.745(g)(2)(i)(C))
 3. If the pressure drop across the dry particulate filter system, as recorded pursuant to §63.752(d)(1), is outside the limit(s) specified by the filter manufacture or in locally prepared operating procedures, shut down the operation immediately and take corrective action. If the booth manufacture's or locally prepared maintenance procedures for the filter have not been performed as scheduled, shut down the operation immediately and take corrective action. The operation shall not be resumed until the pressure drop or water flow rate is returned within specified limits(s). (§63.745(g)(3))
The acceptable pressure drop range for the operating system is from 1.0" to 1.5" of water column for EU0060.

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The acceptable pressure drop range for the operating system is from 0.9" to 1.4" of water column for EU0070.

The acceptable pressure drop range for the operating system is from 0.8" to 1.0" of water column for EU0080.

The acceptable pressure drop range for the operating system is from 0.8" to 1.0" of water column for EU0090.

The acceptable pressure drop range for the operating system is from 0.8" to 1.0" of water column for EU0100.

The acceptable pressure drop range for the operating system is from 0.9" to 1.3" of water column for EU0110.

The permittee should take corrective action when the pressure drop falls or exceeds these operating pressure drop ranges.

- Except as provided in paragraphs (a)(4) through (a)(10) of §63.743(a) and in Table 1 of 40 CFR Part 63, Subpart GG, the permittee is also subject to the following sections of subpart A of this part: (§63.743(a))
 - 1. § 63.4, Prohibited activities and circumvention; (§63.743(a)(1))
 - 2. § 63.5, Construction and reconstruction; and (§63.743(a)(2))
 - 3. § 63.6, Compliance with standards and maintenance requirements. (§63.743(a)(3))
 - 4. For the purposes of this subpart, all affected sources shall submit any request for an extension of compliance not later than 120 days before the affected source's compliance date. The extension request should be requested for the shortest time necessary to attain compliance, but in no case shall exceed 1 year. (§63.743(a)(4))
 - 5. (i) For the purposes of this subpart, the Administrator (or the State with an approved permit program) will notify the owner or operator in writing of his/her intention to deny approval of a request for an extension of compliance submitted under either § 63.6(i)(4) or § 63.6(i)(5) within 60 calendar days after receipt of sufficient information to evaluate the request. (§63.743(a)(5)(i))
 - (ii) In addition, for purposes of this subpart, if the Administrator does not notify the owner or operator in writing of his/her intention to deny approval within 60 calendar days after receipt of sufficient information to evaluate a request for an extension of compliance, then the request shall be considered approved. (§63.743(a)(5)(ii))
 - 6. Except as provided in §63.741(e), the owner or operator of each facility subject to 40 CFR Part 63, Subpart GG that produces a waste that contains HAP shall conduct the handling and transfer of the waste to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills. (§63.748)
- For those wastes subject to 40 CFR Part 63, Subpart GG, failure to comply with the requirements specified in §63.748 shall be considered a violation. (§63.749(i))
- 7. (i) For the purposes of this subpart, the Administrator (or the State) will notify the owner or operator in writing of the status of his/her application submitted under § 63.6(i)(4)(ii) (that is, whether the application contains sufficient information to make a determination) within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted, rather than 15 calendar days as provided for in § 63.6(i)(13)(i). (§63.743(a)(6)(i))
 - (ii) In addition, for the purposes of this subpart, if the Administrator does not notify the owner or operator in writing of the status of his/her application within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted, then the information

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in the application or the supplementary information is to be considered sufficient upon which to make a determination. (§63.743(a)(6)(ii))

8. For the purposes of this subpart, each owner or operator who has submitted an extension request application under § 63.6(i)(5) is to be provided 30 calendar days to present additional information or arguments to the Administrator after he/she is notified that the application is not complete, rather than 15 calendar days as provided for in § 63.6(i)(13)(ii). (§63.743(a)(7))
9. For the purposes of this subpart, each owner or operator is to be provided 30 calendar days to present additional information to the Administrator after he/she is notified of the intended denial of a compliance extension request submitted under either § 63.6(i)(4) or § 63.6(i)(5), rather than 15 calendar days as provided for in § 63.6(i)(12)(iii)(B) and § 63.6(i)(13)(iii)(B). (§63.743(a)(8))
10. For the purposes of this subpart, a final determination to deny any request for an extension submitted under either § 63.6(i)(4) or § 63.6(i)(5) will be made within 60 calendar days after presentation of additional information or argument (if the application is complete), or within 60 calendar days after the final date specified for the presentation if no presentation is made, rather than 30 calendar days as provided for in § 63.6(i)(12)(iv) and § 63.6(i)(13)(iv). (§63.743(a)(9))
11. For the purposes of compliance with the requirements of § 63.5(b)(4) of the General Provisions and this subpart, owners or operators of existing primer or topcoat application operations and depainting operations who construct or reconstruct a spray booth or hangar that does not have the potential to emit 10 tons/yr or more of an individual inorganic HAP or 25 tons/yr or more of all inorganic HAP combined shall only be required to notify the Administrator of such construction or reconstruction on an annual basis. Notification shall be submitted on or before March 1 of each year, and shall include the information required in § 63.5(b)(4) for each such spray booth or hangar constructed or reconstructed during the prior calendar year, except that such information shall be limited to inorganic HAP's. No advance notification or written approval from the Administrator pursuant to § 63.5(b)(3) shall be required for the construction or reconstruction of such a spray booth or hangar unless the booth or hangar has the potential to emit 10 tons/yr or more of an individual inorganic HAP or 25 tons/yr or more of all inorganic HAP combined. (§63.743(a)(10))

Operational Limitation:

- a. The permittee shall conduct the handling and transfer of primers and topcoats to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills. (§63.745(b))
- b. The permittee shall comply with the requirements specified in paragraphs (f)(1) and (f)(2) of §63.745. (§63.745(f))
 1. All primers and topcoats (including self-priming topcoats) shall be applied using one or more of the application techniques in paragraphs (f)(1)(i) through (f)(1)(ix) of §63.745(f). (§63.745(f)(1))
 - (i) Flow/curtain application; (§63.745(f)(1)(i))
 - (ii) Dip coat application; (§63.745(f)(1)(ii))
 - (iii) Roll coating; ((§63.745(f)(1)(iii))
 - (iv) Brush coating; ((§63.745(f)(1)(iv))
 - (v) Cotton-tipped swab application; ((§63.745(f)(1)(v))
 - (vi) Electrodeposition (dip) coating; ((§63.745(f)(1)(vi))
 - (vii) High volume low pressure (HVL) spraying; ((§63.745(f)(1)(vii))
 - (viii) Electrostatic spray application; or ((§63.745(f)(1)(viii))
 - (ix) Other coating application methods that achieve emission reductions equivalent to HVL

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- or electrostatic spray application methods, as determined according to the requirements in §63.750(i). ((§63.745(f)(1)(ix))
2. All application devices used to apply primers or topcoats (including self-priming topcoats) shall be operated according to company procedures, local specified operating procedures, and/or the manufacturer's specifications, whichever is most stringent, at all times. Equipment modified by the facility shall maintain a transfer efficiency equivalent to HVLP and electrostatic spray application techniques. (§63.745(f)(2))
 - c. The emission limitation in Emission Limitation 1. a. through c. shall be achieved by:
 1. The application of low solvent coating technology where each and every coating meets the specified applicable limitation expressed in pounds of VOC per gallon of coating, excluding water and exempt solvents, stated in subsection of Emission Limitation 1.a. through 1.c.;
 2. The application of low solvent coating technology where the monthly volume-weighted average VOC content of each specified coating type meets the specified applicable limitation expressed in pounds of VOC per gallon of coating, excluding water and exempt solvents, stated in Emission Limitation 1.a. through 1.c.; averaging is not allowed for specialty coatings, and averaging is not allowed between primers, topcoats (including self-priming topcoats), Type I milling maskants, and Type II milling maskants or any combination of the above coating categories; or
 3. Control equipment, including but not limited to incineration, carbon absorption and condensation, with a capture system approved by the director, provided that the permittee demonstrates, in accordance with the *Testing* section, that the control system has a VOC reduction efficiency of eighty-one (81%) or greater.

Testing:

If the permittee elects to demonstrate compliance with 10 CSR 10-5.295 by use of control equipment meeting the requirements of Operational Limitation c. 3., shall demonstrate the required capture efficiency in accordance with EPA Methods 18, 25, and/or 25A in 40 CFR 60, Appendix A.

Monitoring:

If a dry particulate filter system is used, the following requirements shall be met:

- Maintain the system in good working order (§63.745(g)(2)(iv)(A))
- Install a differential pressure gauge across the filter banks (§63.745(g)(2)(iv)(B))
- Continuously monitor the pressure drop across the filter and read and record the pressure drop once per shift (§63.745(g)(2)(iv)(C))
- Take corrective action when the pressure drop exceeds or fall below the filter manufacturer's recommended limit(s). (§63.745(g)(2)(iv)(D))
- If the pressure drop across the dry particulate filter system, as recorded pursuant to §63.752(d)(1), is outside the limit(s) specified by the filter manufacture or in locally prepared operating procedures, shut down the operation immediately and take corrective action. (§63.745(g)(3))
- Dry particulate filters used to comply with §63.745(g)(2) or §63.746(b)(4) must be certified by the filter manufacturer or distributor, paint/depainting booth supplier, and/or the facility owner or operator using method 319 in appendix A of subpart A of Part 63, to meet or exceed the efficiency data points found in Tables 1 and 2 of §63.745 for existing sources. (§63.750(o))
- The permittee who uses a dry particulate filter system to meet the requirements of §63.745(g)(2) shall, while primer or topcoat applications are occurring, continuously monitor the pressure drop across the system and read and record the pressure drop once per shift following recordkeeping requirements of §63.752(d) (Record Keeping requirements for Inorganic HAP Control). (§63.751(c)(1))

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Record Keeping:

- Primers and Topcoats – The permittee shall record the following information: (§63.752(c))
 1. The permittee shall fulfill all recordkeeping requirements specified in §63.10 (a), (b), (d), and (f). Please see Appendix B for these recordkeeping requirements. (§63.752(a))
 2. The name and VOC content as received and as applied of each primer and topcoat used at the facility. (§63.752(c)(1))
 3. Each owner or operator of an aerospace manufacture and/or rework operation that applies coatings listed in Emission Limitation 1.a. through 1.c of this permit condition shall-
 - a. Maintain a current list of coatings in use with category and VOC content as applied;
 - b. Record each coating volume usage on a monthly basis; and
 - c. Maintain records of monthly volume-weighted average VOC content for each coating type included in averaging for coating operations that achieve compliance through coating averaging under Operational Limitation c.2. of this permit condition.
 4. For "low HAP content" uncontrolled primers with organic HAP content less than or equal to 250 g/l (2.1 lb/gal) less water as applied and VOC content less than or equal to 250 g/l (2.1 lb/gal) less water and exempt solvents as applied: (§63.752 (c)(3))
 - a. Annual purchase records of the total volume of each primer purchased (§63.752(c)(3)(i))
 - b. All data, calculations, and test results (including EPA Method 24 results) used in determining the organic HAP and VOC content as applied. These records shall consist of the manufacturer's certification when the primer is applied as received, or the data and calculations used to determine H_i if not applied as received. (§63.752(c)(3)(ii))
 5. For primers and topcoats complying with the organic HAP or VOC content level by averaging: (§63.752(c)(4))
 - a. The monthly volume-weighted average masses of organic HAP emitted per unit volume of coating as applied (less water) (H_a) and of VOC emitted per unit volume of coating as applied (less water and exempt solvents) (G_a) for all coatings (as determined by the procedures specified in §63.750(d) and (f)) (§63.752(c)(4)(i))
 - b. All data, calculations and test results (including EPA Method 24 results) used to determine the values H_a and G_a. (§63.752(c)(4)(ii))
- Inorganic HAP Control.
 1. For control of emissions complying with §63.745(g) through the use of a dry particulate filter system or a HEPA filter system, record the pressure drop across the operating system once each shift during which coating operations occur. (§63.752(d)(1))
 2. This log shall include the acceptable limit(s) of pressure drop, water flow rate, or for the pumpless waterwash booth, the booth manufacturer recommended parameter(s) that indicate the booth performance, as applicable, as specified by the filter or booth manufacturer or in locally prepared operating procedures. (§63.752(d)(3))

The acceptable pressure drop range for the operating system is from ??? to ???. The permittee should take corrective action when the pressure drop falls or exceeds this operating pressure drop range.

Use Attachment J, Attachment K, Attachment L (written or electronic), or equivalent forms created by the installation (written or electronic) for the purposes of the Record Keeping requirements of this regulation.

Reporting:

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- The permittee shall submit semiannual reports occurring every six (6) months from the date of the notification of compliance status that identify: (§63.753(c)(1))
 1. Where compliance is not being achieved through the use of averaging or control device, each value of H_i and G_i , as recorded under §63.752(c)(2)(i), that exceeds the applicable organic HAP or VOC content limit specified in §63.745(c). (§63.753(c)(1)(i))
 2. Where compliance is achieved through the use of averaging, each value of H_a and G_a , as recorded under §63.752(c)(4)(i), that exceeds the applicable organic HAP or VOC content limit specified in §63.745(c). (§63.753(c)(1)(ii))
 3. All times when a primer or topcoat application was not immediately shut down when the pressure drop across a dry particulate filter or HEPA filter system was outside the (§63.753(c)(1)(i)) limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures. (§63.753(c)(1)(vi))
 4. If the operations have been in compliance for the semiannual period, (provide) a statement that the operations have been in compliance with the applicable standards. (§63.753(c)(1)(vii))
 5. The permittee shall submit annual reports beginning 12 months after the date of the notification of compliance status listing the number of times the pressure drop was outside the limit(s) as specified by the filter or booth manufacturer or in locally prepared operating procedures. (§63.753(c)(2))
- The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

Permit Condition (EU0060 through EU0120)-003

10 CSR 10-6.400

Restriction of Emission of Particulate Matter from Industrial Processes

Emission Limitation:

1. The permittee shall not cause, suffer, allow or permit the emission of particulate matter in any one (1) hour from Emission Units EU0060 through EU0130 each in excess of the amount calculated using one of the following equations selected based on the applicable process weight rate:
 - For process weight rates of 60,000 pounds per hour (lb/hr) or less:
$$E = 4.10P^{0.67}$$
 - For process weight rates greater than 60,000 lb/hr:
$$E = 55.0P^{0.11} - 40;$$Where: E = rate of emission in lb/hr; and
P = process weight rate in tons per hour; or
2. The limitations established by Emission Limitation 1 shall not require the reduction of particulate matter concentration, based on the source gas volume, below the concentration specified in 10 CSR 10-6.400 (3)(A)2, Table I, for that volume; provided that, for the purposes of this section, the person responsible for the emission may elect to substitute a volume determined according to the provisions of 10 CSR 10-6.400 (3)(A)3. provided further that the burden of showing the source gas volume or other volume substituted, including all the factors which determine volume and the methods of determining and computing the volume shall be on the person seeking to comply with the provisions of this section.
3. The concentration of particulate matter in the exhaust gases shall not exceed 0.30 gr/scf. Notwithstanding the provisions of Emission Limitation 1 and 2, above, the permittee shall not allow or permit emission of particulate

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matter in excess of 0.30 grains per standard cubic foot of exhaust gas.

Monitoring:

- The permittee shall operate the fabric filters according to the Monitoring conditions of Permit Condition (EU0060 through EU0130)-002.

Record Keeping:

- The Record Keeping requirements for the fabric filters from Permit Condition (EU0060 through EU0130)-002 will fulfill the Record Keeping requirements of this permit condition.

Reporting:

The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

EU0140

Bench Spray Booth

General Description:	EU0140 Spray Booth (primer/topcoat) Controlled by Fabric Filter Emission Unit #SB-598-06
Manufacturer/Model #:	N/A
EIQ Reference # (2001):	EP#CL-STC-01 (for EU0140) Control Device # SB598

Permit Condition EU0140-001

10 CSR 10-5.295

Control of Emissions from Aerospace Manufacturing and Rework Facilities

Emission Limitation:

1. The permittee shall not cause, permit, or allow the emissions of volatile organic compounds (VOC) from the coating of aerospace vehicles or components to exceed:
 - a. 2.9 pounds per gallon (350 grams per liter) of coating, excluding water and exempt solvents, delivered to a coating applicator that applies primers. For general aviation rework facilities, the VOC limitation shall be 4.5 pounds per gallon of coating, excluding water and exempt solvents, delivered to a coating applicator that applies to primers;
 - b. 3.5 pounds per gallon (420 grams per liter) of coating, excluding water and exempt solvents, delivered to a coating applicator that applies topcoats (including self-priming topcoats). For general aviation rework facilities,

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the VOC limit shall be 4.5 pounds per gallon (540 grams per liter) of coating, excluding water and exempt solvents, delivered to a coating applicator that applies topcoats (including self-priming topcoats);

- c. The VOC content limits listed in Table 1, of 10 CSR 10-5.295, expressed in pounds per gallon of coating, excluding water and exempt solvent, delivered to a coating applicator that applies specialty coatings;

Operational Limitation:

1. The permittee shall apply all non-exempt primers and topcoats using one (1) or more of the application techniques specified below:
 1. Flow/curtain application;
 2. Dip coat application;
 3. Roll coating;
 4. Brush coating;
 5. Cotton-tipped swab application;
 6. Electrodeposition (dip) coating;
 7. High volume low pressure (HVLP) spraying;
 8. Electrostatic spray application; or
 9. Other coating application methods that achieve emission reduction equivalent to HVLP or electrostatic spray application methods, as determined by the director.
2. The emission limitations in Emission Limitation 1. a. through c.. shall be achieved by:
 - a. The application of low solvent coating technology where each and every coating meets the specified applicable limitation expressed in pounds of VOC per gallon of coating, excluding water and exempt solvents, stated in subsection of Emission Limitation 1.a. through 1.c.;
 - b. The application of low solvent coating technology where the monthly volume-weighted average VOC content of each specified coating type meets the specified applicable limitation expressed in pounds of VOC per gallon of coating, excluding water and exempt solvents, stated in subsection (3)(A) of 10 CSR 10-5.295; averaging is not allowed for specialty coatings, and averaging is not allowed between primers, topcoats (including self-priming topcoats), Type I milling maskants, and Type II milling maskants or any combination of the above coating categories; or
 - c. Control equipment, including but not limited to incineration, carbon absorption and condensation, with a capture system approved by the director, provided that the owner or operator demonstrates, in accordance with the *Testing* section, that the control system has a VOC reduction efficiency of eighty-one (81%) or greater.
3. The permittee shall ensure that all application devices used to apply primers and topcoats (including self-priming topcoats) are operated according to company procedures, local specified operating procedures, and/or the manufacturer's specifications, whichever is most stringent, at all times. Equipment modified by the owner or operator shall maintain a transfer efficiency equivalent to HVLP or electrostatic spray application techniques.

Testing:

If the permittee elects to demonstrate compliance with 10 CSR 10-5.295 by use of control equipment meeting the requirements of Operational Limitation c. 3., shall demonstrate the required capture efficiency in accordance with EPA Methods 18, 25, and/or 25A in 40 CFR 60, Appendix A.

Monitoring/Record Keeping:

- The permittee that applies coatings listed in 10 CSR 10-5.295(3)(A) shall-
 1. Maintain a current list of coating in use with category and VOC content as applied;
 2. Record each coating volume usage on a monthly basis; and

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3. Maintain records of monthly volume-weighted average VOC content for each coating type included in averaging for coating operations that achieve compliance through coating averaging under 10 CSR 10-5.295(3)(B)2. .
- All records must be kept on-site for a period of five (5) years and made available to the department upon request.

Reporting:

The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

EU0170 through EU0220
Combustion Sources

General Description:	<p>EU0170 Combustion Source Fuel: Natural Gas (Back-up – Fuel Oil) Maximum Hourly Design Rate (MHDR) = 20.92 MMBTU/hr Installed after February 15, 1979 Emission Unit #CS-598-01</p> <p>EU0180 Combustion Source Fuel: Natural Gas (Back-up – Fuel Oil) MHDR = 20.92 MMBTU/hr Installed after February 15, 1979 Emission Unit #CS-598-02</p> <p>EU0190 Combustion Source Fuel: Natural Gas (Back-up – Fuel Oil) MHDR = 6.275 MMBTU/hr Installed after February 15, 1979 Emission Unit #CS-598-03</p> <p>EU0200 Combustion Source Fuel: Natural Gas (Back-up – Fuel Oil) MHDR = 6.275 MMBTU/hr Installed after February 15, 1979 Emission Unit #CS-598-04</p> <p>EU0210 Combustion Source Fuel: Natural Gas (Back-up – Fuel Oil) MHDR = 5.23 MMBTU/hr</p>
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Manufacturer/Model #:	N/A
EIQ Reference # (2001):	EP#CS-STC-01 (for EU0170 – EU0220)

Permit Condition (EU0170 through EU0220)-001

10 CSR 10-5.030

Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating

Emission Limitation:

The permittee shall not cause, suffer, allow or permit the emission of particulate matter from Emission Units EU0170 through EU0220 each in excess of the amount calculated using the following equation:

$$E = 0.80(Q)^{-0.301}$$

Where

E = the maximum allowable particulate emission rate in pounds per million BTU of heat input, rounded off to two (2) decimal places; and

Q = the installation heat input in millions of BTU per hour.

Operation Limitation:

This emission unit shall be limited to burning pipeline grade natural gas or fuel oil number 2.

Monitoring/Record Keeping:

- The permittee shall maintain a copy on-site of the Statement of Basis, which contain a potential to emit calculations in terms of pounds of particulate matter per million BTU of heat input for each fuel type burned in this emission unit.
- These records shall be made available immediately to Department of Natural Resources personnel upon request.
- Maintain records for five (5) years.

Reporting:

The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

Permit Condition (EU0170 through EU0220)-002

10 CSR 10-6.260¹

Restriction of Emission of Sulfur Compounds

Emission Limitation:

- During the months of October, November, December, January, February, and March of every year, no person shall burn or permit the burning of any coal containing more than two percent (2%) sulfur or of any fuel oil containing more than two percent (2%) sulfur in any installation having a capacity of less than two thousand

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million (2,000 MM) BTUs per hour.

- During the remainder of the year, no person shall burn or permit the burning of any coal or fuel oil containing more than four percent (4%) sulfur in any installation having a capacity of less than two thousand million (2,000 MM) BTUs per hour.
- No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(4)]

Operation Limitation:

The emission unit shall be limited to burning pipeline grade natural gas or fuel oil no. 2.

Monitoring/Record Keeping/Reporting:

- The permittee shall submit an excess emissions report for each calendar quarter to the director within thirty (30) days following the end of each calendar quarter.
- The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

EU0230 through EU0240
De-painting Operations

General Description:	EU0230 Chemical De-painting Emission Unit #MC-STC-01 EU0240 Non-Chemical De-painting Emission Unit #DP-STC-01
Manufacturer/Model #:	N/A
EIQ Reference # (2001):	EP#MC-STC-01 (for EU0230) EP#None (for EU0240)

Permit Condition (EU0230 through EU0240)-001

10 CSR 10-6.075

Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart GG

National Emission Standards for Aerospace Manufacturing and Rework Facilities

40 CFR Part 63, Subpart A

General Provisions

Emission Limitation/ Operation Limitation:

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1. *HAP emissions - non-HAP chemical strippers and technologies.* Except as provided in §63.746(b)(2) and (b)(3), the permittee of a new or existing aerospace depainting operation subject to this subpart shall emit no organic HAP from chemical stripping formulations and agents or chemical paint softeners. (§63.746(b)(1))
2. Where *non-chemical* based equipment is used to comply with paragraph (b)(1) of §63.746, either in total or in part, the permittee shall maintain the equipment according to the manufacture's specifications or locally prepared procedures. During periods of malfunctions of such equipment, the permittee may substitute materials during the repair period provided the substitute materials used are those available that minimize organic HAP emissions. In no event shall substitute materials be used for more than fifteen (15) days annually, unless such materials are organic HAP-free. (§63.746(b)(2))
3. Each owner or operator of a new or existing depainting operation shall not, on an annual average basis, use more than 26 gallons of organic HAP-containing chemical strippers or alternatively 190 pounds of organic HAP per commercial aircraft depainted; or more than 50 gallons of organic HAP-containing chemical strippers or alternatively 365 pounds of organic HAP per military aircraft depainted for spot stripping and decal removal. (§63.746(b)(3))
4. The permittee complying with Emission Limitation 2, that generates airborne inorganic HAP emissions from dry media blasting equipment, shall also comply with the requirements specified in paragraphs (b)(4)(i) through (b)(4)(v) of this section. (§63.746(b)(4))
 - i. Perform the depainting operation in an enclosed area, unless a closed-cycle depainting system is used.
 - ii.
 - (A) For existing sources pass any air stream removed from the enclosed area or closed-cycle depainting system through a dry particulate filter system, certified using the method described in § 63.750(o) to meet or exceed the efficiency data points in Tables 1 and 2 of § 63.745, through a baghouse, or through a waterwash system before exhausting it to the atmosphere. (§63.746(b)(4)(i))
 - (B) For new sources pass any air stream removed from the enclosed area or closed-cycle depainting system through a dry particulate filter system certified by the filter manufacturer using the method described in § 63.750(o) to meet or exceed the efficiency data points in Tables 3 and 4 of § 63.745 or through a baghouse before exhausting it to the atmosphere. (§63.746(b)(4)(ii))
 - iii. Mechanical and hand sanding operations are exempt from the requirements in Emission Limitation 4. (§63.746(b)(5))
5. Except as provided in paragraphs (a)(4) through (a)(10) of §63.743(a) and in Table 1 of 40 CFR Part 63, Subpart GG, the permittee is also subject to the following sections of subpart A of this part: (§63.743(a))
 - a. § 63.4, Prohibited activities and circumvention; (§63.743(a)(1))
 - b. § 63.5, Construction and reconstruction; and (§63.743(a)(2))
 - c. § 63.6, Compliance with standards and maintenance requirements. (§63.743(a)(3))
 - d. For the purposes of this subpart, all affected sources shall submit any request for an extension of compliance not later than 120 days before the affected source's compliance date. The extension request should be requested for the shortest time necessary to attain compliance, but in no case shall exceed 1 year. (§63.743(a)(4))
 - e.
 - (i) For the purposes of this subpart, the Administrator (or the State with an approved permit program) will notify the owner or operator in writing of his/her intention to deny approval of a request for an extension of compliance submitted under either § 63.6(i)(4) or § 63.6(i)(5) within 60 calendar days after receipt of sufficient information to evaluate the request. (§63.743(a)(5)(i))
 - (ii) In addition, for purposes of this subpart, if the Administrator does not notify the owner or operator in writing of his/her intention to deny approval within 60 calendar days after receipt of sufficient information to evaluate a request for an extension of compliance, then the request shall be considered approved. (§63.743(a)(5)(ii))

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- f. (i) For the purposes of this subpart, the Administrator (or the State) will notify the owner or operator in writing of the status of his/her application submitted under § 63.6(i)(4)(ii) (that is, whether the application contains sufficient information to make a determination) within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted, rather than 15 calendar days as provided for in § 63.6(i)(13)(i). (§63.743(a)(6)(i))
 - (ii) In addition, for the purposes of this subpart, if the Administrator does not notify the owner or operator in writing of the status of his/her application within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted, then the information in the application or the supplementary information is to be considered sufficient upon which to make a determination. (§63.743(a)(6)(ii))
 - g. For the purposes of this subpart, each owner or operator who has submitted an extension request application under § 63.6(i)(5) is to be provided 30 calendar days to present additional information or arguments to the Administrator after he/she is notified that the application is not complete, rather than 15 calendar days as provided for in § 63.6(i)(13)(ii). (§63.743(a)(7))
 - h. For the purposes of this subpart, each owner or operator is to be provided 30 calendar days to present additional information to the Administrator after he/she is notified of the intended denial of a compliance extension request submitted under either § 63.6(i)(4) or § 63.6(i)(5), rather than 15 calendar days as provided for in § 63.6(i)(12)(iii)(B) and § 63.6(i)(13)(iii)(B). (§63.743(a)(8))
 - i. For the purposes of this subpart, a final determination to deny any request for an extension submitted under either § 63.6(i)(4) or § 63.6(i)(5) will be made within 60 calendar days after presentation of additional information or argument (if the application is complete), or within 60 calendar days after the final date specified for the presentation if no presentation is made, rather than 30 calendar days as provided for in § 63.6(i)(12)(iv) and § 63.6(i)(13)(iv). (§63.743(a)(9))
 - j. For the purposes of compliance with the requirements of § 63.5(b)(4) of the General Provisions and this subpart, owners or operators of existing primer or topcoat application operations and repainting operations who construct or reconstruct a spray booth or hangar that does not have the potential to emit 10 tons/yr or more of an individual inorganic HAP or 25 tons/yr or more of all inorganic HAP combined shall only be required to notify the Administrator of such construction or reconstruction on an annual basis. Notification shall be submitted on or before March 1 of each year, and shall include the information required in § 63.5(b)(4) for each such spray booth or hangar constructed or reconstructed during the prior calendar year, except that such information shall be limited to inorganic HAP's. No advance notification or written approval from the Administrator pursuant to § 63.5(b)(3) shall be required for the construction or reconstruction of such a spray booth or hangar unless the booth or hangar has the potential to emit 10 tons/yr or more of an individual inorganic HAP or 25 tons/yr or more of all inorganic HAP combined. (§63.743(a)(10))
6. *Startup, shutdown, and malfunction plan.* The permittee which uses an air pollution control device or equipment to control HAP emissions shall prepare and operate in accordance with a startup, shutdown, and malfunction plan in accordance with § 63.6. Dry particulate filter systems operated per the manufacturer's instructions are exempt from a startup, shutdown, and malfunction plan. A startup, shutdown, and malfunction plan shall be prepared for facilities using locally prepared operating procedures. In addition to the information required in § 63.6, this plan shall also include the following provisions: (§63.743(b))
- (1) The plan shall specify the operation and maintenance criteria for each air pollution control device or equipment and shall include a standardized checklist to document the operation and maintenance of the equipment; (§63.743(b)(1))
 - (2) The plan shall include a systematic procedure for identifying malfunctions and for reporting them immediately to supervisory personnel; and (§63.743(b)(2))

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(3) The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur. (§63.743(b)(3))

7. *Except* as provided in §63.741(e), the owner or operator of each facility subject to 40 CFR Part 63, Subpart GG that produces a waste that contains HAP shall conduct the handling and transfer of the waste to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills. (§63.748)

For those wastes subject to 40 CFR Part 63, Subpart GG, failure to comply with the requirements specified in §63.748 shall be considered a violation. (§63.749(i))

Monitoring:

Each owner or operator seeking to comply with § 63.746(b)(3) shall determine the volume of organic HAP-containing chemical strippers or alternatively the weight of organic HAP used per aircraft using the procedure specified in paragraphs (j)(1) through (j)(3) of this section. (§63.750(j))

- For each chemical stripper used for spot stripping and decal removal, determine for each annual period the total volume as applied or the total weight of organic HAP using the procedure specified in §63.750(d)(2) below: (§63.750(j)(1))
 - Determine the volume both in total gallons as applied and in total gallons (less water) as applied of each coating. If any ingredients, including diluent solvents, are added prior to its application, the volume of each coating shall be determined at a time and location in the process after all ingredients (including any diluent solvent) have been added. (§63.750(d)(2)(i))
 - Determine the volume of each coating (less water) as applied each month, unless the permitting agency specifies a shorter period as part of an ambient ozone control program. (§63.750(d)(2)(ii))
 - The volume applied may be determined from company records. (§63.750(d)(2)(iii))
- Determine the total number of aircraft for which depainting operations began during the annual period as determined from company records. (§63.750(j)(2))
- Calculate the annual average volume of organic HAP-containing chemical stripper or weight of organic HAP used for spot stripping and decal removal per aircraft using equation 20 (volume) or equation 21 (weight): (§63.750(j)(3))
(Eq. 20)

$$C = \frac{\sum_{i=1}^n V_{si}}{A}$$

Where

C = annual average volume (gal per aircraft) of organic HAP-containing chemical stripper used for spot stripping and decal removal.

n = number of organic HAP-containing chemical strippers used in the annual period.

V_{si} = volume (gal) of organic HAP-containing chemical stripper i used during the annual period.

A = number of aircraft for which depainting operations began during the annual period.

(Eq. 21)

$$C = \frac{\sum_{i=1}^n \left(V_{si} D_{hi} \left(\sum_{h=1}^m W_{hi} \right) \right)}{A}$$

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Where

C = annual average weight (lb per aircraft) of organic HAP (chemical stripper) used for spot stripping and decal removal.

m = number of organic HAP contained in each chemical stripper, as applied.

n = number of organic HAP-containing chemical strippers used in the annual period.

W_{hi} = weight fraction (expressed as a decimal) of each organic HAP "i" contained in the chemical stripper, as applied, for each aircraft depainted.

D_{hi} = density (lb/gal) of each organic HAP-containing chemical stripper "i", used in the annual period.

V_{si} = volume (gal) of organic HAP-containing chemical stripper "i" used during the annual period.

A = number of aircraft for which depainting operations began during the annual period.

Record Keeping:

- The permittee shall fulfill all recordkeeping requirements specified in §63.10 (a), (b), (d), and (f). Please see Appendix B for these recordkeeping requirements. (§63.752(a))

Each owner or operator subject to the depainting standards specified in §63.746 shall record the information specified in paragraphs (e)(1) through (e)(7) of this section, as appropriate. (§63.752(e))

General. For all chemical strippers used in the depainting operation: (§63.752(e)(1))

1. The name of each chemical stripper; and (§63.752(e)(1)(i))
 2. Monthly volumes of each organic HAP-containing chemical stripper used or monthly weight of organic HAP-material used for spot stripping and decal removal. (§63.752(e)(1)(ii))
- For each type of aircraft depainted at the facility, a listing of the parts, subassemblies, and assemblies normally removed from the aircraft before depainting. Prototype, test model or aircraft that exist in low numbers (i.e., less than 25 aircraft of any one type) are exempt from this requirement. (§63.752(e)(4))
 - *Non-chemical based equipment.* If dry media blasting equipment is used to comply with the organic HAP emission limit specified in § 63.746(b)(1): (§63.752(e)(5))
 1. The names and types of non-chemical based equipment; and (§63.752(e)(5)(i))
 2. For periods of malfunction, (§63.752(e)(5)(ii))
 - a. The non-chemical method or technique that malfunctioned; (§63.752(e)(5)(ii)(A))
 - b. The date that the malfunction occurred; (§63.752(e)(5)(ii)(B))
 - c. A description of the malfunction; (§63.752(e)(5)(ii)(C))
 - d. The methods used to depaint aerospace vehicles during the malfunction period; (§63.752(e)(5)(ii)(D))
 - e. The dates that these methods were begun and discontinued; and (§63.752(e)(5)(ii)(E))
 - f. The date that the malfunction was corrected. (§63.752(e)(5)(ii)(F))
 - *Spot stripping and decal removal.* For spot stripping and decal removal, the volume of organic HAP-containing chemical stripper or weight of organic HAP used, the annual average volume of organic HAP-containing stripper or weight of organic HAP used per aircraft, the annual number of aircraft stripped, and all data and calculations used. (§63.752(e)(6))
 - *Inorganic HAP emissions.* Inorganic HAP emissions. Each owner or operator shall record the actual pressure drop across the particulate filters or the visual continuity of the water curtain and water flow rate for conventional waterwash systems once each shift in which the depainting process is in operation. For pumpless waterwash systems, the owner or operator shall record the parameter(s) recommended by the booth manufacturer that indicate the performance of the booth once per shift in which the depainting process is in operation. This log shall include the acceptable limit(s) of the pressure drop as specified by the filter manufacturer, the visual continuity of the water

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curtain and the water flow rate for conventional waterwash systems, or the recommended parameter(s) that indicate the booth performance for pumpless systems as specified by the booth manufacturer or in locally prepared operating procedures. (§63.752(e)(7))

Use Attachment L, Attachment M, Attachment N (written or electronic), or equivalent forms created by the installation (written or electronic) for the purposes of the Record Keeping requirements of this regulation.

Reporting:

- The permittee shall submit semiannual reports occurring every 6 months from the date of the notification of compliance status that identify: (§63.753(d)(1))
 1. Any 24-hour period where organic HAP were emitted from the depainting of aerospace vehicles, other than from the exempt operations listed in § 63.746 (a), (b)(3), and (b)(5). (§63.753(d)(1)(i))
 2. Any new chemical strippers used at the facility during the reporting period; (§63.753(d)(1)(ii))
 3. The organic HAP content of these new chemical strippers; (§63.753(d)(1)(iii))
 4. For each chemical stripper that undergoes reformulation, its organic HAP content; (§63.753(d)(1)(iv))
 5. Any new non-chemical depainting technique in use at the facility since the notification of compliance status or any subsequent semiannual report was filed; (§63.753(d)(1)(v))
 6. For periods of malfunctions: (§63.753(d)(1)(vi))
 - a. The non-chemical method or technique that malfunctioned; (§63.753(d)(1)(vi)(A))
 - b. The date that the malfunction occurred; (§63.753(d)(1)(vi)(B))
 - c. A description of the malfunction; (§63.753(d)(1)(vi)(C))
 - d. The methods used to depaint aerospace vehicles during the malfunction period; (§63.753(d)(1)(vi)(D))
 - e. The dates that these methods were begun and discontinued; and (§63.753(d)(1)(vi)(E))
 - f. The date that the malfunction was corrected; (§63.753(d)(1)(vi)(F))
 7. A list of new and discontinued aircraft models depainted at the facility over the last 6 months and a list of the parts normally removed for depainting for each new aircraft model being depainted; and (§63.753(d)(1)(viii))
 8. If the depainting operation has been in compliance for the semiannual period, a statement signed by a responsible company official that the operation was in compliance with the applicable standards. (§63.753(d)(1)(ix))
- The permittee shall submit annual reports occurring every 12 months from the date of the notification of compliance status that identify: (§63.753(d)(2))
 1. The average volume per aircraft of organic HAP-containing chemical strippers or weight of organic HAP used for spot stripping and decal removal operations if it exceeds the limits specified in § 63.746(b)(3); and (§63.753(d)(2)(i))
- The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

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General Description:	<p>EU0260 Emergency Generator MHDR = 33 HP Natural Gas Fired Installed after March 24, 1967 Emission Unit #EG-508-01</p> <p>EU0280 Emergency Generator MHDR = 150 HP Natural Gas Fired Installed after March 24, 1967 Emission Unit #EG-598-01</p> <p>EU0290 Emergency Generator MHDR = 200 HP Natural Gas Fired Installed after March 24, 1967 Emission Unit #EG-598-02</p> <p>EU0300 Emergency Generator MHDR = 235.7 HP Natural Gas Fired Installed after March 24, 1967 Emission Unit #EG-599-01</p>
Manufacturer/Model #:	N/A
EIQ Reference # (2001):	EP#None (for EU0260 and EU0280 through EU0300)

Permit Condition (EU0260 and EU0280 through EU0300)-001

10 CSR 10-6.260²

Restriction of Emission of Sulfur Compounds

Emission Limitation:

- Emissions from any existing or new source operation shall not contain more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide.
- Stack gasses shall not contain more than thirty-five milligrams (35 mg) per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.
- No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(4)]

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Operation Limitation:

The emission unit shall be limited to burning pipeline grade natural gas.

Monitoring/Record Keeping/Reporting:

- The permittee shall report any change of fuel type to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 within 10 days of the switch of fuel types.
- The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

EU0310 through EU0320
Emergency Generators

General Description:	EU0310 Emergency Generator MHDR = 200 HP Fuel Oil #2 Diesel Fired Installed after March 24, 1967 Emission Unit #EG-550-01 EU0320 Emergency Generator MHDR = 465 HP Fuel Oil #2 Diesel Fired Installed after March 24, 1967 Emission Unit #EG-598-03
Manufacturer/Model #:	N/A
EIQ Reference # (2001):	EP#None (for EU0310 through EU0350)

Permit Condition (EU0310 through EU0320)-001

10 CSR 10-6.260³

Restriction of Emission of Sulfur Compounds

Emission Limitation:

- Emissions from any existing or new source operation shall not contain more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide.
- Stack gasses shall not contain more than thirty-five milligrams (35 mg) per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.
- No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(4)]

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Operation Limitation:

The emission unit shall be limited to burning number 2 fuel oil.

Monitoring/Record Keeping:

Fuel receipts shall be kept for five (5) years. These records shall be made available immediately for inspection upon request from Department of Natural Resources personnel.

Reporting:

- The permittee shall report any change of fuel type to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 within ten (10) days of the switch of fuel types.
- The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

EU0340

Fuel Storage Tanks

General Description:	Gasoline Underground Storage Tank Capacity = 1000 gallons Emission Unit #ST-506-20
Manufacturer/Model #:	N/A
EQ Reference # (2001):	EP#ST-STC-01

Permit Condition EU0340-001

10 CSR 10-5.220

Control of Petroleum Liquid Storage, Loading, and Transfer

Emission Limitation:

The permittee shall not cause or permit the transfer of gasoline from any delivery vessel into any stationary storage tank with a capacity greater than 500 gallons unless the storage tank is equipped with a submerged fill pipe extending unrestricted to within six inches (6") of the bottom of the tank, and not touching the bottom of the tank, or the storage tank is equipped with a system that allows a bottom fill condition.

Monitoring:

1. The permittee shall keep records documenting the vessel owners and number of delivery vessels unloaded by each owner.
2. Records should be made available to the staff director within five days of request.
3. The permittee shall keep on-site copies of the lading ticket, manifest or delivery receipt for each grade of product received, subject to examination upon request.
4. If a delivery receipt is retained rather than a manifest or loading ticket, the delivery ticket shall bear the following information: vendor name, date of delivery, quantity of each grade, point of origin, and the manifest or loading ticket number. The required retention on-site of the loading ticket, manifest or delivery receipt shall be limited to

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the four (4) most recent records for each grade of product.

Record Keeping:

Keep record documenting the number of delivery vessels unloaded and their owners. Also keep records of routine and unscheduled maintenance and repairs and of all results of tests conducted. Records shall be kept for five (5) years and made available upon request.

Reporting:

The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

Permit Condition EU0340-002

40 CFR Part 80.22(j)

Regulation of Fuels and Fuel Additives
(Federally Enforceable Only)

Emission Limitation:

Fuel flow rate from nozzle into motor vehicles shall not exceed 10 gal/min.

Monitoring:

As defined in the regulation

Record Keeping:

As defined in the regulation

Reporting:

The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

EU0360
Fuel Storage Tanks

General Description:	Gasoline Underground Fuel Oil #2 Storage Tank Capacity = 25,000 gallons Emission Unit #ST-598-21
Manufacturer/Model #:	N/A
EIQ Reference # (2001):	EP#ST-STC-01

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Permit Condition EU0360-001

10 CSR 10-6.070

New Sources Performance Regulations

40 CFR Part 60, Subpart Kb

Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which construction, reconstruction, or modification commenced after July 23, 1984

Emission Limitation:

Except as specified in paragraphs (a) and (b) of §60.116b, vessels either with a capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure less than 3.5 kPa or with a capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure less than 15.0 kPa are exempt from the General Provisions (part 60, subpart A) and from the provisions of this subpart. (§60.110b(c))

Monitoring:

The record required by the Record Keeping requirement (paragraph (b) of §60.110b) will be kept for the life of the source. (§60.116b(a))

Record Keeping:

The owner or operator of each storage vessel as specified in §60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Each storage vessel with a design capacity less than 75 cubic meters is subject to no provision of this subpart other than those required by this paragraph. (§60.116b(b))

Reporting:

The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

EU0370

Vapor Degreasers

General Description:	Open Top Vapor Degreasers Emission Unit #VD-598-01
Manufacturer/Model #:	N/A
EIQ Reference # (2001):	EP#VD-598-01

Permit Condition EU0370-001

10 CSR 10-6.060

Construction Permits Required

Construction Permit #0396-022

Emission Limitation:

The total combined emissions of volatile organic compounds (VOCs) from the following emission units shall be limited to

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Monitoring/Record Keeping:

Records (see example: Attachment E) shall be kept on for the most recent 5-year period of plant operation. The records shall contain both the monthly and 12-month totals. These records shall be made available to Department of Natural Resources personnel upon request.

Reporting:

The source shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of each month, if the 12-month cumulative total (Monitoring/Record Keeping) records show that the source exceeded the limitation of the Emission Limitation. (Special Condition 3)

Permit Condition EU0370-002

10 CSR 10-6.075

Maximum Available Control Technology Regulations

40 CFR Part 63, Subpart T

Halogenated Solvent Cleaning

Emission Limitation:

As an alternative to meeting the requirements in §63.463, each owner or operator of a batch vapor or in-line solvent cleaning machine can elect to comply with the requirements of §63.464. An owner or operator who elects to comply with §63.464 shall comply with:

1. Since the cleaning machine has a solvent/air interface, the owner or operator shall comply with the requirements below: (§63.464(a)(1))
 - a. Maintain a log of solvent additions and deletions for each solvent cleaning machine (§63.464(a)(1)(i))
 - b. Ensure that the emissions from each solvent cleaning machine are equal to or less than the applicable emission limit (150 kilograms/square meter per month) presented in Table 5 of §63.464 as determined using §63.465(b) and (c)
2. Each owner or operator shall demonstrate compliance with the applicable 3-month rolling average monthly emission limit on a monthly basis as described in §63.465(b) and (c). (§63.464(b))
3. If the applicable 3-month rolling average emission limit is not met, an exceedance has occurred. All exceedances shall be reported as required in §63.468(h). (§63.464(c))

Alternate Compliance Method:

The equipment standards as stated in 40 CFR Part 63, Subpart T as alternate standards, may be used to show compliance instead of those listed above. If one of the alternate standards is used the monitoring, record Keeping and reporting requirements listed in the regulation, for the standard chosen, will be followed.

Monitoring:

- Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with § 63.464 shall, on the first operating day of every month ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent and used solvent that has been cleaned of soils. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill-line each month, immediately prior to calculating monthly emissions as specified in §63.465(c). The solvent cleaning machine does not have to be emptied and filled with fresh unused

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solvent prior to the calculations. (§63.465(b))

- The permittee of a batch vapor or in-line solvent cleaning machine complying with § 63.464 shall on the first operating day of the month comply with the requirements specified in paragraphs (c)(1) through (c)(3) of this section.

1. Using the records of all solvent additions and deletions for the previous monthly reporting period required under § 63.464(a), determine solvent emissions (E_i) using equation 2 for cleaning machines with a solvent/air interface: (§63.465(c)(1))

$$E_i = \frac{SA_i - LSR_i - SSR_i}{AREA_i} \quad \text{Equation (2)}$$

Where:

E_i = the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent monthly reporting period i , (kilograms of solvent per square meter of solvent/air interface area per month).

SA_i = the total amount of halogenated HAP liquid solvent added to the solvent cleaning machine during the most recent monthly reporting period i , (kilograms of solvent per month).

LSR_i = the total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine during the most recent monthly reporting period i , (kilograms of solvent per month).

SSR_i = the total amount of halogenated HAP solvent removed from the solvent cleaning machine in solid waste, obtained as described in paragraph (c)(2) of this section, during the most recent monthly reporting period i , (kilograms of solvent per month).

$AREA_i$ = the solvent/air interface area of the solvent cleaning machine (square meters).

2. Determine SSR_i using the method specified in paragraph (c)(2)(i) or (c)(2)(ii) of this section.
 - a. From tests conducted using EPA reference method 25d.
 - b. By engineering calculations included in the compliance report. (§63.465(c)(2))
3. Determine the monthly rolling average, EA , for the 3-month period ending with the most recent reporting period using equation 2 for cleaning machines with a solvent/air interface:

Equation (2)

$$EA_i = \frac{\sum_{j=1}^3 E_j}{3}$$

Where:

EA_i = the average halogenated HAP solvent emissions over the preceding 3 monthly reporting periods, (kilograms of solvent per square meter of solvent/air interface area per month).

E_j = halogenated HAP solvent emissions for each month (j) for the most recent 3 monthly reporting periods (kilograms of solvent per square meter of solvent/air interface area).

$j=1$ = the most recent monthly reporting period.

$j=2$ = the monthly reporting period immediately prior to $j=1$.

$j=3$ = the monthly reporting period immediately prior to $j=2$. (§63.465(c)(3))

4. An owner or operator of a source shall determine their potential to emit from all solvent cleaning operations,

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using the procedures in paragraphs a. through c. below. A facility's total potential to emit is the sum of the HAP emissions from all solvent cleaning operations, plus all HAP emissions from other sources within the facility. (§63.465(e))

- a. Determine the potential to emit for each individual solvent cleaning using equation 1.

$$PTE_i = H_i \times W_i \times SAI_i \quad (1)$$

Where:

PTE_i=the potential to emit for solvent cleaning machine i (kilograms of solvent per year).

H_i=hours of operation for solvent cleaning machine i (hours per year).

=8760 hours per year, unless otherwise restricted by a Federally enforceable requirement.

W_i=the working mode uncontrolled emission rate (kilograms per square meter per hour).

=1.95 kilograms per square meter per hour for batch vapor and cold cleaning machines.

=1.12 kilograms per square meter per hour for in-line cleaning machines.

SAI_i = solvent/air interface area of solvent cleaning machine i (square meters). Section 63.461 defines the solvent/air interface area for those machines that have a solvent/air interface. Cleaning machines that do not have a solvent/air interface shall calculate a solvent/air interface area using the procedure in paragraph (e)(2) of this section.

- b. Cleaning machines that do not have a solvent/air interface shall calculate a solvent/air interface area using equation 2.

$$SAI = 2.20 * (Vol)^{0.6} \quad (2)$$

Where:

SAI=the solvent/air interface area (square meters).

Vol=the cleaning capacity of the solvent cleaning machine (cubic meters).

- c. Sum the PTE_i for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility.

Record Keeping:

Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of § 63.464 shall maintain records specified in paragraphs (c)(1) through (3) of this section either in electronic or written form for a period of 5 years.

- The dates and amounts of solvent that are added to the solvent cleaning machine. Use Attachment O (written or electronic), or an equivalent form (written or electronic), for the purposes of this Record Keeping requirement.
- The solvent composition of wastes removed from cleaning machines as determined using the procedure described in § 63.465(c)(2). Use Attachment O (written or electronic), or an equivalent form (written or electronic), for the purposes of this Record Keeping requirement.
- Calculation sheets showing how monthly emissions and the rolling 3-month average emissions from the solvent cleaning machine were determined, and the results of all calculations. Use Attachment P (written or electronic), or an equivalent form (written or electronic), for the purposes of this Record Keeping requirement. (§63.467(c))

Reporting:

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- Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of § 63.464 shall submit a solvent emission report every year. This solvent emission report shall contain:
 1. The size and type of each unit subject to 40 CFR Part 63, Subpart T (solvent/air interface area or cleaning capacity). (§63.468(g)(1))
 2. The average monthly solvent consumption for the solvent cleaning machine in kilograms per month. (§63.468(g)(2))
 3. The 3-month monthly rolling average solvent emission estimates calculated each month using the method as described in § 63.465(c). (§63.468(g)(3))
 4. The reports required under paragraphs (f) and (g) of this section can be combined into a single report for each facility. (§63.468(g)(4))
- Each owner or operator of a batch vapor or in-line solvent cleaning machine shall submit an exceedance report to the Administrator semiannually except when, the Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, an exceedance occurs. Once an exceedance has occurred the owner or operator shall follow a quarterly reporting format until a request to reduce reporting frequency under paragraph (i) of this section is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include:
 1. Information on the actions taken to comply with § 63.463 (e) and (f). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels. (§63.468(h)(1))
 2. If an exceedance has occurred, the reason for the exceedance and a description of the actions taken. (§63.468(h)(2))
 3. If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report. (§63.468(h)(3))
- An owner or operator who is required to submit an exceedance report on a quarterly (or more frequent) basis may reduce the frequency of reporting to semiannual if :
 1. The source has demonstrated a full year of compliance without an exceedance. (§63.468(i)(1))
 2. The owner or operator continues to comply with all relevant recordkeeping and monitoring requirements specified subpart A (General Provisions) and in this subpart. (§63.468(i)(2))
 3. The Administrator does not object to a reduced frequency of reporting for the affected source as provided in paragraph (e)(3)(iii) of subpart A (General Provisions). (§63.468(i)(3))
- The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

Permit Condition EU0370-003

10 CSR 10-5.300

Control of Emission from Solvent Metal Cleaning

Emission Limitation:

- Each vapor degreaser shall have:
 1. A cover which will prevent the escape of solvent vapors from the solvent bath while in the closed position.
 2. The cover shall be such that it can be easily operated with one (1) hand and without disturbing the solvent vapors

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in the tank. For covers larger than ten (10) square feet this shall be accomplished by mechanical assistance such as spring loading or counter weighting or by power systems.

3. The degreaser shall be equipped with a vapor level safety thermostat with a manual reset which shuts off the heating source when the vapor level rises above the cooling or condensing coil. An equivalent control device may be approved by the director.
4. The vapor degreaser with an air/vapor interface over 10 $\frac{3}{4}$ square feet shall be equipped with one of the following:
 - a. Freeboard ratio of at least .75,
 - b. Refrigerated chiller,
 - c. Enclosed design (the cover or door opens only when the dry part actually is entering or exiting the degreaser,
 - d. Carbon adsorption system with ventilation of at least fifty (5) cubic feet per minute per square foot of air vapor area when the cover is open and exhausting less than twenty-five (25) parts per million (25 ppm) of solvent by volume averaged over one (1) complete adsorption cycle as measured using the reference method specified at 10 CSR 10-6.030(14)(A), or
 - e. Control system with a mass balance demonstrated overall VOC emissions reduction efficiency greater than or equal to sixty five percent (65%) and prior approval by the director.
5. A permanent, conspicuous label summarizing the operating procedures shall be affixed to the machine.

Operation Limitation:

- Each vapor degreaser shall be operated as follows:
 1. Vapor degreaser covers shall be closed at all times except when processing parts through the degreaser
 2. Solvent carry-out shall be minimized by:
 - a. Parts shall be racked, if practical, to allow full drainage,
 - b. Parts shall be moved in and out of the degreaser at less than eleven feet per minute (11 fpm),
 - c. Workload shall remain in the vapor zone at least thirty (30) seconds or until condensation ceases,
 - d. Pools of solvent shall be removed from cleaned parts before removing parts from the degreaser freeboard area, and
 - e. Cleaned parts shall be allowed to dry within the degreaser freeboard area for at least fifteen (15) seconds or until visually dry, whichever is longer.
 3. Porous or absorbent materials such as cloth, leather, wood, or rope shall not be degreased.
 4. If workloads occupy more than half of the degreaser's open-top area, rate of entry and removal shall not exceed five feet (5') per minute.
 5. Spray shall never extend above vapor level.
 6. Whenever a vapor degreaser fails to perform within the operating parameters established for it by this regulation, the unit shall be shut down immediately and shall remain shut down until trained service personnel are able to restore operation within the established parameters.
 7. Solvent leaks shall be repaired immediately or the degreaser shall be shut down until the leaks are repaired.
 8. Ventilation exhaust shall not exceed sixty five (65) cubic feet per minute per square foot of degreaser open area unless proof is submitted that it is necessary to meet Occupational Safety and Health Administration (OSHA) requirements. Fans shall not be used near the degreaser opening.
 9. Water shall not be visually detectable in solvent exiting the water separator.
 10. Any waste material removed from a vapor degreaser shall be disposed of by one (1) of the following methods and in accordance with the Missouri Hazardous Waste Management Commission rules codified at 10 CSR 10-25, as applicable:
 - a. Reduction of the waste material to less than twenty percent (20%) VOC solvent by distillation and proper disposal

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of the still bottom waste, or

- b. Stored in closed containers for transfer to a contract reclamation service or a disposal facility approved by the director.
 11. Waste solvent shall be stored in covered containers only.
- Operators must be trained as follows:
 1. Only persons trained in at least the operational and equipment requirements specified in this regulation for their particular solvent metal cleaning process shall be permitted to operate the equipment,
 2. The supervisor of any person who operates a solvent metal cleaning process shall receive equal or greater operational training than the operator,
 3. Refresher training shall be given to all solvent metal cleaning equipment operators at least once each twelve (12) month period.

Monitoring:

The permittee shall monitor the throughputs of the solvents monthly and maintain material safety data sheets of the cleanup solvents used at the installation.

Record Keeping:

- The permittee shall keep monthly inventory records of solvent types and amounts purchased and solvent consumed for a period of five (5) years. The records shall include all types and amounts of solvent containing waste material transferred to either a contract reclamation service or to a disposal installation and all amounts distilled on the premises. The record also shall include maintenance and repair logs.
- Records shall be maintained of all solvent metal cleaning training for each employee for a period of five years.

Reporting:

- The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

EU0380 through EU0390
Natural Gas Coating Ovens

General Description:	EU0380 Coating Oven Emission Unit #OV-598-01 EU0390 Coating Oven Emission Unit #OV-598-02
Manufacturer/Model #:	N/A
EIQ Reference # (2001):	EP#CL-STC-01

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Permit Condition (EU0380 through EU0390)-001

10 CSR 10-6.060

Construction Permits Required

Construction Permit #0396-022

Emission Limitation:

The total combined emissions of volatile organic compounds (VOCs) from the following emission units shall be limited to 77.95 tons in any consecutive 12-month period: Secret Coating Booths (SB) 598-01 through SB 598-05 inclusive (EU0060 through EU0100, EU0120), SB 599-01(EU0110), and Ovens (OV) 598-01 through OV 598-02 inclusive (EU0380 through EU0390). Other points include a vapor-degreaser VD-598-01(EU0370). (Special Condition 1)

Monitoring/Record Keeping:

Records (see example: Attachment E) shall be kept on for the most recent 5-year period of plant operation. The records shall contain both the monthly and 12-month totals. These records shall be made available to Department of Natural Resources personnel upon request. (Special Condition 2)

Reporting:

The source shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of each month, if the 12-month cumulative total (Monitoring/Record Keeping) records show that the source exceeded the limitation of the Emission Limitation. (Special Condition 3)

Permit Condition (EU0380 through EU0390)-002

10 CSR 10-6.260⁴

Restriction of Emission of Sulfur Compounds

Emission Limitation:

- Emissions from any existing or new source operation shall not contain more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide.
- Stack gasses shall not contain more than thirty-five milligrams (35 mg) per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.
- No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(4)]

Operation Limitation:

The emission unit shall be limited to burning natural gas.

Monitoring/Record Keeping:

Fuel receipts shall be kept for five years. These records shall be made available immediately for inspection upon request from Department of Natural Resources personnel.

Reporting:

- The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

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EU0410 through EU0460

Natural Gas Fired Indirect Heating Units (Existing Units)

General Description:

EU0410
Boiler (Loop 23)
MHDR = 6.00 MMBTU/hr
Emission Unit #CS-STC-01A

EU0420
Boiler (Front Office)
MHDR = 4.19 MMBTU/hr
Emission Unit #CS-STC-01A

EU0430
Make-up Air Unit #47 (Café)
MHDR = 2.11 MMBTU/hr
Emission Unit #CS-STC-01A

EU0440
Unit Heater #5 (Col. M-17)
MHDR = 1.25 MMBTU/hr
Emission Unit #CS-STC-01A

EU0450
Make-up Air Unit Paint Booth
MHDR = 2.00 MMBTU/hr
Emission Unit #CS-STC-01A

EU0460
Roof Top Unit Renzor
MHDR = 1.25 MMBTU/hr
Emission Unit #CS-STC-01A

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Manufacturer/Model #:	N/A
EIQ Reference # (2001):	EP#CS-STC-01 (for EU0410 through EU0460)

Permit Condition (EU0410 through EU0460)-001

10 CSR 10-5.030

Maximum Allowable Emission of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating.

Emission Limitation:

The permittee shall not cause, suffer, allow or permit the emission of particulate matter from Emission Units EU0410 through EU0460 each in excess of the amount calculated using the following equation:

$$E = 1.09(Q)^{-0.259}$$

Where

E = the maximum allowable particulate emission rate in pounds per million BTU of heat input, rounded off to two (2) decimal places; and

Q = the installation heat input in millions of BTU per hour.

Operation Limitation:

This emission unit shall be limited to burning pipeline grade natural gas.

Monitoring/Record Keeping:

- The permittee shall maintain a copy on-site of the Statement of Basis, which contain a potential to emit calculations in terms of pounds of particulate matter per million BTU of heat input for each fuel type burned in this emission unit.
- These records shall be made available immediately to Department of Natural Resources personnel upon request.
- Maintain records for five (5) years.

Reporting:

The permittee shall report to the ACP Enforcement Section, PO Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of 10 CSR 10-5.030.

Permit Condition (EU0410 through EU0460)-002

10 CSR 10-6.260⁵

Restriction of Emission of Sulfur Compounds

Emission Limitation:

- No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(4)]

Operation Limitation:

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The emission unit shall be limited to burning pipeline grade natural gas.

Monitoring/Record Keeping/Reporting:

- The permittee shall submit an excess emissions report for each calendar quarter to the director within thirty (30) days following the end of each calendar quarter.
- The permittee shall report to the APCP Enforcement Section, PO Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of 10 CSR 10-6.260.

EU0470 through EU0530

Natural Gas Fired Indirect Heating Units (New Units)

General Description:	<p>EU0470 AHU (B Section of Building) MHDR = 1.25 MMBTU/hr Emission Unit #CS-STC-01A</p> <p>EU0480 Boiler #1 MHDR = 4.19 MMBTU/hr Emission Unit = 5.23 MMBTU/hr Emission Unit #CS-STC-01A</p> <p>EU0490 Boiler #2 MHDR = 5.23 MMBTU/hr Emission Unit #CS-STC-01A</p> <p>EU0500 Roof Top Unit MHDR = 1.25 MMBTU/hr Emission Unit #CS-STC-01A</p> <p>EU0510 Fire Pump House Boiler MHDR = 1.28 MMBTU/hr Emission Unit #CS-STC-01A</p> <p>EU0520 Standby Boiler MHDR = 1.50 MMBTU/hr Emission Unit #CS-STC-01A</p> <p>EU0530 Miscellaneous Small Combustion MHDR = 4.45 MMBTU/hr Emission Unit #CS-STC-01A</p>
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Manufacturer/Model #:	N/A
EIQ Reference # (2001):	EP#CS-STC-01 (for EU0470 through EU0530)

Permit Condition (EU0470 through EU0530)-001

10 CSR 10-5.030

Maximum Allowable Emission of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating.

Emission Limitation:

The permittee shall not cause, suffer, allow or permit the emission of particulate matter from Emission Units EU0470 through EU0530 each in excess of the amount calculated using the following equation:

$$E = 0.80(Q)^{-0.301}$$

Where

E = the maximum allowable particulate emission rate in pounds per million BTU of heat input, rounded off to two (2) decimal places; and

Q = the installation heat input in millions of BTU per hour.

Operation Limitation:

This emission unit shall be limited to burning pipeline grade natural gas.

Monitoring/Record Keeping:

- The permittee shall maintain a copy on-site of the Statement of Basis, which contain a potential to emit calculations in terms of pounds of particulate matter per million BTU of heat input for each fuel type burned in this emission unit.
- These records shall be made available immediately to Department of Natural Resources personnel upon request.
- Maintain records for five (5) years.

Reporting:

The permittee shall report to the APCP Enforcement Section, PO Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of 10 CSR 10-5.030.

Permit Condition (EU0470 through EU0530)-002

10 CSR 10-6.260⁶

Restriction of Emission of Sulfur Compounds

Emission Limitation:

- No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(4)]

Operation Limitation:

The emission unit shall be limited to burning pipeline grade natural gas.

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Monitoring/Record Keeping/Reporting:

- The permittee shall submit an excess emissions report for each calendar quarter to the director within thirty (30) days following the end of each calendar quarter.
- The permittee shall report to the APCP Enforcement Section, PO Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of 10 CSR 10-6.260.

EU0590

Adhesives and Sealant

General Description:	Adhesives and Sealant
Manufacturer/Model #:	N/A
EQ Reference # (2001):	None

Permit Condition EU0590-001

10 CSR 10-5.295

Control of Emissions from Aerospace Manufacturing and Rework Facilities

Emission Limitation:

1. The permittee shall not cause, permit, or allow the emissions of volatile organic compounds (VOC) from the coating of aerospace vehicles or components to exceed:
 - a. 2.9 pounds per gallon (350 grams per liter) of coating, excluding water and exempt solvents, delivered to a coating applicator that applies primers. For general aviation rework facilities, the VOC limitation shall be 4.5 pounds per gallon of coating, excluding water and exempt solvents, delivered to a coating applicator that applies to primers;
 - b. 3.5 pounds per gallon (420 grams per liter) of coating, excluding water and exempt solvents, delivered to a coating applicator that applies topcoats (including self-priming topcoats). For general aviation rework facilities, the VOC limit shall be 4.5 pounds per gallon (540 grams per liter) of coating, excluding water and exempt solvents, delivered to a coating applicator that applies topcoats (including self-priming topcoats);
 - c. The VOC content limits listed in Appendix A (Table 1 of 10 CSR 10-5.295), expressed in pounds per gallon of coating, excluding water and exempt solvent, delivered to a coating applicator that applies specialty coatings;

Operational Limitation:

1. The emission limitation in Emission Limitation 1. a. through c. shall be achieved by:
 - a. The application of low solvent coating technology where each and every coating meets the specified applicable limitation expressed in pounds of VOC per gallon of coating, excluding water and exempt solvents, stated in subsection of Emission Limitation 1.a. through 1.c.;
 - b. The application of low solvent coating technology where the monthly volume-weighted average VOC content of each specified coating type meets the specified applicable limitation expressed in pounds of VOC per gallon of coating, excluding water and exempt solvents, stated in Emission Limitation 1.a. through 1.c.; averaging is not allowed for specialty coatings, and averaging is not allowed between primers, topcoats (including self-priming topcoats), Type I milling maskants, and Type II milling maskants or any combination of the above coating categories; or

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- c. Control equipment, including but not limited to incineration, carbon absorption and condensation, with a capture system approved by the director, provided that the permittee demonstrates, in accordance with the *Testing* section, that the control system has a VOC reduction efficiency of eighty-one (81%) or greater.

Testing:

If the permittee elects to demonstrate compliance with 10 CSR 10-5.295 by use of control equipment meeting the requirements of Operational Limitation c. 3., shall demonstrate the required capture efficiency in accordance with EPA Methods 18, 25, and/or 25A in 40 CFR 60, Appendix A.

Monitoring/Record Keeping:

- Each owner or operator of an aerospace manufacture and/or rework operation that applies coatings -
 1. Maintain a current list of coating in use with category and VOC content as applied;
 2. Record each coating volume usage on a monthly basis; and
 3. Maintain records of monthly volume-weighted average VOC content for each coating type included in averaging for coating operations that achieve compliance through coating averaging under paragraph (3)(B)2. of this rule.
- All records must be kept on-site for a period of five (5) years and made available to the department upon request.

Reporting:

The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

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IV. Core Permit Requirements

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

10 CSR 10-6.050, Start-up, Shutdown and Malfunction Conditions

- (a.) In the event of a malfunction, which results in excess emissions that exceed one (1) hour, the permittee shall submit to the director within two (2) business days in writing the following information:
 - (1.) Name and location of installation;
 - (2.) Name and telephone number of person responsible for the installation;
 - (3.) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
 - (4.) Identity of the equipment causing the excess emissions;
 - (5.) Time and duration of the period of excess emissions;
 - (6.) Cause of the excess emissions;
 - (7.) Air pollutants involved;
 - (8.) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
 - (9.) Measures taken to mitigate the extent and duration of the excess emissions; and
 - (10.) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- (b.) The permittee shall submit the paragraph (a.) information list to the director in writing at least ten (10) days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one (1) hour. If notice of the event cannot be given ten (10) days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one (1) hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten (10) working days.
- (c.) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph (a.) list and shall be submitted not later than fifteen (15) days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.
- (d.) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the

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Air Conservation Law and the corresponding rule.

- (e.) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060, Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five (5) years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065, Operating Permits

The permittee shall file for renewal of this operating permit no sooner than eighteen months, nor later than six months, prior to the expiration date of this operating permit. The permittee shall retain the most current operating permit issued to this installation on-site and shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request.

10 CSR 10-6.110, Submission of Emission Data, Emission Fees and Process Information

- (a.) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
- (b.) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079 to satisfy the requirements of the Federal Clean Air Act, Title V.
- (c.) The fees shall be due April 1 each year for emissions produced during the previous calendar year. The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the director.

10 CSR 10-6.130, Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/red), watch or emergency and the associated procedures and emissions reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150, Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.180, Measurement of Emissions of Air Contaminants

- ☐ The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.

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- (a.) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- (b.) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-5.070, Open Burning Restrictions

- ☐ The permittee shall not conduct, cause, permit or allow a salvage operation, the disposal of trade wastes or burning of refuse by open burning.
- (c.) Exception - Open burning of trade waste or vegetation may be permitted only when it can be shown that open burning is the only feasible method of disposal or an emergency exists which requires open burning.
- (d.) Any person intending to engage in open burning shall file a request to do so with the director. The request shall include the following:
 - (1.) The name, address and telephone number of the person submitting the application; The type of business or activity involved; A description of the proposed equipment and operating practices, the type, quantity and composition of trade wastes and expected composition and amount of air contaminants to be released to the atmosphere where known;
 - (2.) The schedule of burning operations;
 - (3.) The exact location where open burning will be used to dispose of the trade wastes;
 - (4.) Reasons why no method other than open burning is feasible; and
 - (5.) Evidence that the proposed open burning has been approved by the fire control authority which has jurisdiction.
- (e.) Upon approval of the open burning permit application by the director, the person may proceed with the operation under the terms of the open burning permit. Be aware that such approval shall not exempt The Boeing Corporation from the provisions of any other law, ordinance or regulation.
- (f.) The permittee shall maintain files with letters from the director approving the open burning operation and previous DNR inspection reports.

10 CSR 10-5.160, Restriction of Emission of Odors

No person shall emit odorous matter as to cause an objectionable odor on or adjacent to:

- ☐ Residential, recreational, institutional, retail sales, hotel or educational premises.
- (g.) Industrial premises when air containing odorous matter is diluted with twenty (20) or more volumes of odor-free air; or
- (h.) Premises other than those in paragraphs (1)A.1. and (2) of the rule when air containing odorous matter is diluted with four (4) or more volumes of odor-free air.

The previously mentioned requirement shall apply only to objectionable odors. An odor will be deemed objectionable when thirty percent (30%) or more of a sample of the people exposed to it believe it to be objectionable in usual places of occupancy; the sample size to be at least twenty (20) people or seventy-five percent (75%) of those exposed if fewer than twenty (20) people are exposed.

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This requirement is not federally enforceable.

10 CSR 10-6.100, Alternate Emission Limits

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants

40 CFR Part 61 Subpart M, National Emission Standard for Asbestos

- (a) The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.
- (b) The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

10 CSR 10-6.250, Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the department. Certain business entities that meet the requirements for state-approved exemption status must allow the department to monitor training classes provided to employees who perform asbestos abatement.

This requirement is State only enforceable

Title VI – 40 CFR Part 82, Protection of Stratospheric Ozone

- (a.) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - (1.) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
 - (2.) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - (3.) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
 - (4.) No person may modify, remove, or interfere with the required warning statement except as described

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in §82.112.

- (b.) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
 - (1.) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - (2.) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - (3.) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - (4.) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
 - (5.) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
 - (6.) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- (c.) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- (d.) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR part 82*

10 CSR 10-6.280, Compliance Monitoring Usage

- a) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
 - 1) Monitoring methods outlined in 40 CFR Part 64;
 - 2) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - 3) Any other monitoring methods approved by the director.
- b) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
 - 1) Monitoring methods outlined in 40 CFR Part 64;

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- 2) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
- 3) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- c) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - 1) Applicable monitoring or testing methods, cited in:
 - 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
 - 10 CSR 10-6.040, "Reference Methods";
 - 10 CSR 10-6.070, "New Source Performance Standards";
 - 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
 - 2) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

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V. General Permit Requirements

Permit Duration

10 CSR 10-6.065(6)(C)1.B.

This permit is issued for a term of five (5) years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

General Record Keeping and Reporting Requirements

10 CSR 10-6.065(6)(C)1.C

I) Record Keeping

- A) All required monitoring data and support information shall be retained for a period of at least five (5) years from the date of the monitoring sample, measurement, report or application.
- B) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.

II) Reporting

- A) The permittee shall submit a report of all required monitoring by:
 - 1) October 1st for monitoring which covers the January through June time period, and
 - 2) April 1st for monitoring which covers the July through December time period.
 - 3) Exception: Monitoring requirements which require reporting more frequently than semi annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
- B) Each report must identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
- C) All reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102.
- D) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten (10) days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - 1) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7 of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two (2) working days after the date on which the emission limitation is exceeded due to the emergency, if you wish to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and that you can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate

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emissions, and the corrective actions taken.

- 2) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
 - 3) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in the permit.
 - 4) These supplemental reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 no later than ten (10) days after any exceedance of any applicable rule, regulation, or other restriction.
- E) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten (10) days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten (10) days after that, together with any corrected or supplemental information required concerning the deviation.
- F) The permittee may request confidential treatment of information submitted in any report of deviation.

Risk Management Plans Under Section 112(r)

10 CSR 10-6.065(6)(C)1.D.

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

- 1) June 21, 1999;
- 2) Three (3) years after the date on which a regulated substance is first listed under 40 CFR Section 68.130;
or
- 3) The date on which a regulated substance is first present above a threshold quantity in a process.

Severability Clause

10 CSR 10-6.065(6)(C)1.F.

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

General Requirements

10 CSR 10-6.065(6)(C)1.G

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the

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permit.

- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and re-issuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, will not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

Incentive Programs Not Requiring Permit Revisions

10 CSR 10-6.065(6)(C)1.H.

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

Compliance Requirements

10 CSR 10-6.065(6)(C)3.

- I) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- II) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
 - A) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - B) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - C) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - D) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- III) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
 - A) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and

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- dates when these activities, milestones or compliance were achieved, and
- B) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- IV) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, as well as the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
- A) The identification of each term or condition of the permit that is the basis of the certification,
 - B) The current compliance status, as shown by monitoring data and other information reasonably available to the installation,
 - C) Whether compliance was continuous or intermittent,
 - D) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period, and
 - E) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

Permit Shield

10 CSR 10-6.065(6)(C)6.

- I) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
- A) The applicable requirements are included and specifically identified in this permit; or
 - B) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
- II) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
- A) The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders,
 - B) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
 - C) The applicable requirements of the acid rain program,
 - D) The administrator's authority to obtain information, or
 - E) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.
- III) At the time of permit issuance, the following equipment was exempt from the requirements of 10 CSR 10-5.295, *Control of Emissions from Aerospace Manufacturing and Rework Facilities*:
- 1. The following cleaning operations are exempt from the requirements of subsection (3)(F) of 10 CSR 10-5.295:
 - a. Cleaning during the manufacture, assembly, installation, maintenance, or testing of components of breathing

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- oxygen systems that are exposed to the breathing oxygen; (§63.744(e)(1))
- b. Cleaning during the manufacture, assembly, installation, maintenance or testing of parts, subassemblies, or assemblies that are exposed to strong oxidizers or reducers (e.g., nitrogen tetroxide, liquid oxygen, hydrazine, etc.); (§63.744(e)(2))
 - c. Cleaning and surface activation prior to adhesive bonding; (§63.744(e)(3))
 - d. Cleaning of electronic parts and assemblies containing electronic parts; (§63.744(e)(4))
 - e. Cleaning of aircraft and ground support equipment fluid systems that are exposed to the fluid, including air-to-air heat exchangers and hydraulic fluid systems; (§63.744(e)(5))
 - f. Cleaning of fuel cells, fuel tanks, and confined spaces; (§63.744(e)(6))
 - g. Surface cleaning of solar cells, coated optics, and thermal control surfaces; (§63.744(e)(7))
 - h. Cleaning during fabrication, assembly, installation, and maintenance of upholstery, curtains, carpet, and other textile materials used in the interior of the aircraft; (§63.744(e)(8))
 - i. Cleaning of metallic and non-metallic materials used in honeycomb cores during the manufacture or maintenance of these cores, and cleaning of the completed cores used in the manufacture of aerospace vehicles or components; (§63.744(e)(9))
 - j. Cleaning of aircraft transparencies, polycarbonate, or glass substrates; and (§63.744(e)(10))
 - k. Cleaning and cleaning solvent usage associated with research and development, quality control, and laboratory testing. (§63.744(e)(11))
 - l. Cleaning operations, using nonflammable liquids, conducted within five (5) feet of energized electrical systems. Energized electrical systems means AC or DC electrical circuit on an assembled aircraft once electrical power is connected, including interior passenger and cargo areas, wheel wells and tail sections. (§63.744(e)(12))
 - m. Cleaning operations identified as essential uses under the Montreal Protocol for which the Administrator has allocated essential use allowances or exemptions in 40 CFR 82.4. (§63.744(e)(13))
2. The following situations are exempt from the requirements of subsection (3)(D) and (3)(E) of 10 CSR 10-5.295:
- (i) Any situation that normally requires the use of an airbrush or an extension on the spray gun to properly reach limited access spaces;
 - (ii) The application of any specialty coating;
 - (iii) The application of coatings that contain fillers that adversely affect atomization with HVLP spray guns and that the permitting agency has determined cannot be applied by any of the application methods specified in subsection (3)(C) of 10 CSR 10-5.295;
 - (iv) The application of coatings that normally have a dried film thickness of less than 0.0013 centimeter (0.0005 in.) and that the permitting agency has determined cannot be applied by any of the application methods specified in subsection (3)(C) of 10 CSR 10-5.295;
 - (v) The use of airbrush application methods for stenciling, lettering, and other identification markings;
 - (vi) The use of hand-held spray can application methods; and
 - (vii) Touch-up and repair operations.
3. The following activities are exempt from subsection (3) of 10 CSR 10-5.295:
- 1. Research and development;
 - 2. Quality control;
 - 3. Laboratory testing activities;
 - 4. Chemical milling;
 - 5. Metal finishing;
 - 6. Electrodeposition except for the electrodeposition of paints;

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7. Composites processing except for cleaning and coating of composite parts or components that become part of an aerospace vehicle or component as well as composite tooling that comes in contact with such composite parts or components prior to cure;
8. Electronic parts and assemblies except for cleaning a topcoating of completed assemblies;
9. Manufacture of aircraft transparencies;
10. Wastewater treatment operations;
11. Manufacturing and rework of parts and assemblies not critical to the vehicle's structural integrity or flight performance;
12. Regulated activities associated with space vehicles designed to travel beyond the limit of the earth's atmosphere including but not limited to satellites, space stations, and the space shuttle;
13. Utilization of primers, topcoats, specialty coatings, cleaning solvents, chemical milling maskants, and strippers containing VOC at concentrations less than 0.1 percent for carcinogens or 1 percent for noncarcinogens;
14. Utilization of touchup, aerosol can, and Department Defense classified coatings;
15. Maintenance and rework of antique aerospace vehicle and components; and
16. Rework of aircraft or aircraft components if the holder the Federal Aviation Administration design approval, or the holder's licensee, is not actively manufacturing the aircraft or aircraft components.

IV) At the time of permit issuance, the following equipment was exempt from the requirements of 10 CSR 10-6.220, *Restriction of Visible Air Contaminants*:

- (A) Internal combustion engines operated outside the St. Louis metropolitan areas and stationary internal combustion engines operated in the St. Louis metropolitan areas;
- (B) Wood burning stoves or fireplaces used for heating;
- (C) Fires used for recreational or ceremonial purposes or fires used for the noncommercial preparation of food by barbecuing;
- (D) Fires used solely for the purpose of fire-fighter training;
- (E) Truck dumping of nonmetallic minerals into any screening operation, feed hopper or crusher;
- (F) Emission sources regulated by 40 CFR part 60 and 10 CSR 10-6.070;
- (G) Any open burning that is exempt from applicable open burning rules 10 CSR 10-2.100, 10 CSR 10-3.030, 10 CSR 10-4.090 and 10 CSR 10-5.070;

V) At the time of permit issuance, the following equipment was exempt from the requirements of 40 CFR Part 63, Subpart GG, *National Emission Standards for Aerospace Manufacturing and Rework Facilities*:

1. The following cleaning operations are exempt from the requirements of §63.744(b) Hand-wipe cleaning: (§63.744(e))
 - n. Cleaning during the manufacture, assembly, installation, maintenance, or testing of components of breathing oxygen systems that are exposed to the breathing oxygen; (§63.744(e)(1))
 - o. Cleaning during the manufacture, assembly, installation, maintenance or testing of parts, subassemblies, or assemblies that are exposed to strong oxidizers or reducers (e.g., nitrogen tetroxide, liquid oxygen, hydrazine, etc.); (§63.744(e)(2))
 - p. Cleaning and surface activation prior to adhesive bonding; (§63.744(e)(3))
 - q. Cleaning of electronic parts and assemblies containing electronic parts; (§63.744(e)(4))
 - r. Cleaning of aircraft and ground support equipment fluid systems that are exposed to the fluid, including air-to-air heat exchangers and hydraulic fluid systems; (§63.744(e)(5))

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- s. Cleaning of fuel cells, fuel tanks, and confined spaces; (§63.744(e)(6))
 - t. Surface cleaning of solar cells, coated optics, and thermal control surfaces; (§63.744(e)(7))
 - u. Cleaning during fabrication, assembly, installation, and maintenance of upholstery, curtains, carpet, and other textile materials used in the interior of the aircraft; (§63.744(e)(8))
 - v. Cleaning of metallic and non-metallic materials used in honeycomb cores during the manufacture or maintenance of these cores, and cleaning of the completed cores used in the manufacture of aerospace vehicles or components; (§63.744(e)(9))
 - w. Cleaning of aircraft transparencies, polycarbonate, or glass substrates; and (§63.744(e)(10))
 - x. Cleaning and cleaning solvent usage associated with research and development, quality control, and laboratory testing. (§63.744(e)(11))
 - y. Cleaning operations, using nonflammable liquids, conducted within five (5) feet of energized electrical systems. Energized electrical systems means AC or DC electrical circuit on an assembled aircraft once electrical power is connected, including interior passenger and cargo areas, wheel wells and tail sections. (§63.744(e)(12))
 - z. Cleaning operations identified as essential uses under the Montreal Protocol for which the Administrator has allocated essential use allowances or exemptions in 40 CFR 82.4. (§63.744(e)(13))
2. The requirements of paragraphs of §63.745 (g)(1) through (g)(3) of this section do not apply to the following: (§63.745(g)(4))
- (a) Touch-up of scratched surfaces or damaged paint; (§63.745(g)(4)(i))
 - (b) Hole daubing for fasteners; (§63.745(g)(4)(ii))
 - (c) Touch-up of trimmed edges; (§63.745(g)(4)(iii))
 - (d) Coating prior to joining dissimilar metal components; (§63.745(g)(4)(iv))
 - (e) Stencil operations performed by brush or air brush; (§63.745(g)(4)(v))
 - (f) Section joining; (§63.745(g)(4)(vi))
 - (g) Touch-up of bushings and other similar parts; (§63.745(g)(4)(vii))
 - (h) Sealant detackifying; (§63.745(g)(4)(viii))
 - (i) Painting parts in an area identified in a title V permit, where the permitting authority has determined that it is not technically feasible to paint the parts in a booth as follows: (§63.745(g)(4)(ix))
 - (j) The use of hand-held spray can application methods. (§63.745(g)(4)(x))
3. The following situations are exempt from the requirements of paragraph (f)(1) of this section: (§63.745(f)(3))
- (viii) Any situation that normally requires the use of an airbrush or an extension on the spray gun to properly reach limited access spaces; (§63.745(f)(3)(i))
 - (ix) The application of coatings that contain fillers that adversely affect atomization with HVLP spray guns and that the permitting agency has determined cannot be applied by any of the application methods specified in paragraph (f)(1) of §63.745(f); (§63.745(f)(3)(ii))
 - (x) The application of coatings that normally have a dried film thickness of less than 0.0013 centimeter (0.0005 in.) and that the permitting agency has determined cannot be applied by any of the application methods specified in paragraph (f)(1) of §63.745(f); (§63.745(f)(3)(iii))
 - (xi) The use of airbrush application methods for stenciling, lettering, and other identification markings; specified in paragraph (f)(1) of §63.745(f); (§63.745(f)(3)(iv))
 - (xii) The use of hand-held spray can application methods; and (§63.745(f)(3)(v))
 - (xiii) Touch-up and repair operations. specified in paragraph (f)(1) of §63.745(f); (§63.745(f)(3)(vi))

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Emergency Provisions

10 CSR 10-6.065(6)(C)7.

- I) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7. shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
- A) That an emergency or upset occurred and that you can identify the source of the emergency or upset,
 - B) That the installation was being operated properly,
 - C) That you took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
 - D) That you submitted notice of the emergency to the Air Pollution Control Program within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- II) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

Operational Flexibility

10 CSR 10-6.065(6)(C)8.

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program and the Administrator at least seven (7) days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that established an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- I) Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), record keeping, reporting or compliance requirements of the permit.
- A) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program and to the Administrator, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and this agency shall place a copy with the permit in the public file. Written notice shall be provided to the administrator and this

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agency at least seven (7) days before the change is to be made. If less than seven (7) days notice is provided because of a need to respond more quickly to these unanticipated conditions, The permittee shall provide notice to the administrator and the permitting authority as soon as possible after learning of the need to make the change.

B) The permit shield shall not apply to these changes.

Off-Permit Changes

10 CSR 10-6.065(6)(C)9.

- D) Except as noted below, The permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
- A) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; The permittee may not change a permitted installation without a permit revision, if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
 - B) The permittee must provide written notice of the change to the permitting authority and to the administrator no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under paragraph (6)(B)3. of this rule. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
 - C) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
 - D) The permit shield shall not apply to these changes.

Responsible Official

10 CSR 10-6.020(2)(R)12.

The application utilized in the preparation of this was signed by John J. Van Gels, Vice President General Manager Production Operation and General Services. John J. Van Gels, Vice President General Manager Production Operation and General Services. The Vice President of the Shared Services Group (Gerard J. Olsen) and the Director of Safety, Health and Environmental Affairs (Michael J. Dwyer) may serve as alternate Responsible Officials should Mr. Van Gels be unavailable. If these people terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that

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were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

Reopening Permit For Cause

10 CSR 10-6.065(6)(E)6.

In accordance with 10 CSR 10-6.065(6)(E)6.A., this permit may be reopened with cause if:

- 1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
- 2) MDNR or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
- 5) MDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

Statement of Basis

10 CSR 10-6.065(6)(E)1.C.

This permit is accompanied by a statement setting forth the legal and factual basis for the draft permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

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Attachment A

Sample Record Form Compliance Demonstration

10 CSR 10-6.170, Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin
Fugitive Emission Observation

[illegible]

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Sample Record Form
Compliance Demonstrations
10 CSR 10-6.220, Restriction of Emission of Visible Contaminants
Opacity Observations

[illegible]

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Attachment C

Sample Record Form
Compliance Demonstrations
10 CSR 10-6.220, Restriction of Emission of Visible Contaminants

This record keeping sheet or something similar may be used for the record keeping requirements of 10 CSR 10-6.220.

Method 22 (Outdoor) Observation Log

Responsible Installation

Operator:

Date:

Sky Condition:

Precipitation:

Wind Direction:

Wind Speed:

Process Unit:

Sketch process unit: Indicate the position relative to the source and sun; mark the potential emission points and/or the observing points.

Observations	Clock Time	Observation Period Duration, min:sec	Accumulated Emission Time, min:sec
Begin Observation			
End Observation			

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Attachment D

This record keeping sheet or something similar may be used for the record keeping requirements of permit condition pw002.

Opacity Emission Observations (Method 9)

Company _____
Location _____
Date _____
Time _____

Observer _____
Observer Certification Date _____
Type Installation _____
Pt. Of Emiss. _____
Control Device _____

Hour	Min	Seconds				Steam Plume (check if applicable)		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							

SUMMARY OF AVERAGE OPACITY

Set Number	Time	Opacity	
	Start - End	Sum	Average

Readings ranged from ____ to ____ % opacity.

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The Source was/was not in compliance with ____ at the time evaluation was made.

(Signature of Observer)

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Attachment E

Sample Record Form
VOC Emission Compliance Sheet
10 CSR 10-6.060, *Construction Permits Required*
Construction Permit #0396-022

This record keeping sheet may be used for the record keeping requirements of permit conditions (EU0060 through EU0110)-001, (EU0140 through EU0150)-001, EU0370-001, (EU0380 through EU0430)-001, and any other ink stamping process, conformal coating process, or various soldering processes.

This sheet covers the period from

_____ to _____
(month, year) (month, year)

Monthly VOC Emission Tracking Record

Date Month/Year	Column 1 Amount of Chemical Used (gal)	Column 2* VOC Emission Factor (lb/gal)	Column 3 ** Monthly VOC Emissions (Tons)	Column 4*** Sum of Most Recent 12 Months (Tons)

* Sum of Emission Factors of All Processes

** Column 1 x Column 2 x 0.0005

*** Sum of Last 12 Months of Column 3

Emission Limitation:

The total combined emissions of volatile organic compounds (VOCs) from the following emission points shall be limited to 77.95 tons in any consecutive 12-month period.: Secret Coating Booths (SB) 598-01 through SB 598-09 inclusive (EU0060 through EU0100, EU0430), SB 599-01(EU0110), and Ovens (OV) 598-01 through OV 598-05 inclusive (EU0380 through EU0420). Other points include a vapor-degreaser VD-598-01(EU0370), ink stamping process, conformal coating process, and various soldering processes. (Special Condition 1)

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Attachment F

10 CSR 10-6.060, *Construction Permits Required*
Construction Permit #0996-014

This attachment may be used to help meet the record keeping requirements of Permit Conditions: EU0020.

This Sheet covers the period from
_____ to _____.
(month, year) (month, year)

Operation: Cold Cleaner

Month	Column A* Amount of Solvent Processed (gal)	Column B Emission Factor Density (lbs/gal)	Column C Conversion factor lbs to tons	Column D** Total tons emitted this month	Column E*** Sum of most recent 12 months (tons)

- * Assume 100% evaporation unless mass balance proves otherwise
- ** Multiply column A x column B x column C
- *** Sum of last 12 entries in column D

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Attachment G

Sample Record Form
10 CSR 10-6.075, *Maximum Achievable Control Technology Regulations*
40 CFR Part 63, Subpart GG

Emission Unit: _____

Cleaning Solvent Name: _____

Vapor Pressure: _____

HAP Constituents: _____

Emission Unit: _____

Cleaning Solvent Name: _____

Vapor Pressure: _____

HAP Constituents: _____

Emission Unit: _____

Cleaning Solvent Name: _____

Vapor Pressure: _____

HAP Constituents: _____

Emission Unit: _____

Cleaning Solvent Name: _____

Vapor Pressure: _____

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HAP Constituents: _____

Duplicate this Form as Needed

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Attachment H

Sample Record Form

10 CSR 10-6.075, *Maximum Achievable Control Technology Regulations*
40 CFR Part 63, Subpart GG

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Attachment I

Sample Record Form
10 CSR 10-6.075, *Maximum Achievable Control Technology Regulations*
40 CFR Part 63, Subpart GG

Plant Name: _____

Emission Unit Number: _____

Supervisor: _____

Inventory Date			
Operation Performed			
Exempt or non-exempt activity ¹			
Solvent Used ²			
Manufacturer			
Source of HAP Constituents	MSDS <input type="checkbox"/> Testing <input type="checkbox"/>	MSDS <input type="checkbox"/> Testing <input type="checkbox"/>	MSDS <input type="checkbox"/> Testing <input type="checkbox"/>

Organic HAP Constituents include % of each HAP					

Aqueous solvent % water ≥ 80 Miscible with water Flash point > 200 °F	Yes <input type="checkbox"/> No <input type="checkbox"/> ____ Yes <input type="checkbox"/> No <input type="checkbox"/> ____ Yes <input type="checkbox"/> No <input type="checkbox"/> ____	Yes <input type="checkbox"/> No <input type="checkbox"/> ____ Yes <input type="checkbox"/> No <input type="checkbox"/> ____ Yes <input type="checkbox"/> No <input type="checkbox"/> ____	Yes <input type="checkbox"/> No <input type="checkbox"/> ____ Yes <input type="checkbox"/> No <input type="checkbox"/> ____ Yes <input type="checkbox"/> No <input type="checkbox"/> ____
Hydrocarbon based solvent VP ≤ 7 mmHg @ 20°C Photochemically reactive or Oxygenated No HAP	Yes <input type="checkbox"/> No <input type="checkbox"/> ____ Yes <input type="checkbox"/> No <input type="checkbox"/> ____ Yes <input type="checkbox"/> No <input type="checkbox"/> ____ Yes <input type="checkbox"/> No <input type="checkbox"/> ____	Yes <input type="checkbox"/> No <input type="checkbox"/> ____ Yes <input type="checkbox"/> No <input type="checkbox"/> ____ Yes <input type="checkbox"/> No <input type="checkbox"/> ____ Yes <input type="checkbox"/> No <input type="checkbox"/> ____	Yes <input type="checkbox"/> No <input type="checkbox"/> ____ Yes <input type="checkbox"/> No <input type="checkbox"/> ____ Yes <input type="checkbox"/> No <input type="checkbox"/> ____ Yes <input type="checkbox"/> No <input type="checkbox"/> ____
Composite Vapor Pressure ≤ 45 mmHg @ 20 °C ³ (Option 2)	Yes <input type="checkbox"/> No <input type="checkbox"/> ____	Yes <input type="checkbox"/> No <input type="checkbox"/> ____	Yes <input type="checkbox"/> No <input type="checkbox"/> ____

Compliance Method ⁴			
Material usage (in gallons)	Actual <input type="checkbox"/> Purchase <input type="checkbox"/>	Actual <input type="checkbox"/> Purchase <input type="checkbox"/>	Actual <input type="checkbox"/> Purchase <input type="checkbox"/>

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January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
Yearly Total (gals)			

¹Exempt operations that do not conform to VP or composition requirements must be reported. See back of form for list of exempt operations.

²Keep a record of the solvent name, VP, and organic HAP constituents as required in 63.752(b)(1), general cleaning. MSDSs or Product Data Sheets can be used.

³ See back of form for calculating composite vapor pressures.

⁴ Option 3 (solvent reduction >60%) requires submission of an alternate plan (?63.477(b)(3))

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Attachment J

Plant Name: _____ Emission Unit Number: _____ Supervisor: _____

Record info in Bold

Report info in italics semi-annually

Example 1

Example 2

	B-550, R-110	<i>B-100, R-550</i>			
--	---------------------	---------------------	--	--	--

Cleaning on)	Enclosed	x	Enclosed	x	Enclosed		Enclosed		Enclosed	
	Non-atomized	x	Non-atomized		Non-atomized		Non-atomized		Non-atomized	
	Disassembled	x	Disassembled	x	Disassembled		Disassembled		Disassembled	
	Atomized		Atomized		Atomized		Atomized		Atomized	
	Other ¹		Other ¹		Other ¹		Other ¹		Other ¹	

used)	Gun Cleaner #SV738	<i>Gun Cleaner #16104</i>			
	Aircraft Thinner Type X	Aircraft Thinner Type Y			

s used, inspect monthly and record deficiency ³

	Ckd 1/1/98 - No leaks found	Ckd 1/1/98 - No leaks found			
	Ckd 2/1/98 - Seal Broke. Repaired 2/10/98	<i>Ckd 2/1/98 - Valve broke (no repairs made)</i>			
	Ckd 3/1/98 - No leaks found	<i>Ckd 3/1/98 - Valve broke. Shut down 3/15/98</i>			
	Ckd 4/1/98 - No leaks found	Shutdown			
	Ckd 5/1/98 - No leaks found	Shutdown			
	Ckd 6/1/98 - No leaks found	Shutdown			
	Ckd 7/1/98 - No leaks found	7/15/98 Taken out of service			

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	Leak <u>not reportable</u> since repaired within 15 days.	<u>Report leak</u> since you discovered it 2/1 but didn't shut down til 3/15 (>15 days)			

¹ if other (non-compliant) method is used, report semi-annual

² keep a record of the solvent name, VP, and organic HAP constituents as required in 63.752(b)(1), general cleaning. MSDSs or Product Data Sheets can be use.

³ inspect while machine is operating. If leak is found, repair within 15 days or remove solvent and shut down system until leak is repaired (63.744(c)(ii)).

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Attachment K

Sample Record Form
10 CSR 10-6.075, *Maximum Achievable Control Technology Regulations*
40 CFR Part 63, Subpart GG

Plant Name: _____ Emission Unit Number: _____ Supervisor: _____

Date: _____

Application method ¹	Paint type ² (primer or topcoat)	Material name	Manufacturer	Paint usage, gal	Paint VOC, lb/gal	Paint HAP, lb/gal	Thinner added, gal ³	Thinner VOC, lb/gal	Thinner HAP, lb/gal	Total VOC	Total HAP	Control device used ⁴
HVLP	Primer	Universal Primer	Primer USA	1.5	1.5	0.25	7.0	0		1.76	1.4	PF
HVLP	Topcoat	EP Gray	Deft	20	3.2	2.1	--	--	--	3.2	2.1	--

For water wash and dry particulate filter systems⁵, record the pressure drop/flow rate across the operating system once each shift:

Acceptable pressure drop	Acceptable water flow rate	Shift 1	Shift 2	Shift 3	Shift 4	Comments

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- ¹ Unless otherwise approved, application techniques must be: Flow/curtain coating; dip coat application; Roll coating; Brush Coating; Cotton-tipped sw application; Electrodeposition coating; HVLP spraying; and electrostatic spraying.
- ² Maximum content, as applied for Primers is 350 g/liter (2.9 lb/gal) HAP and 250 g/liter (2.9 lb/gal) VOC. Maximum content for Topcoats is 420 g/liter (3.5 lb/gal) HAP and 420 g/liter (3.5 lb/gal) VOC. Maximum content for Self-Priming Topcoats is the same as for Topcoats.
- ³ Calculations must be for "as applied" and include any coating and products added (thinner has been used as an example).
- ⁴ Control device options for organic HAPs include carbon adsorbtion (CA), incineration (I), non-carbon adsorbtion (NCA), nonregenerative carbon adsorbtion (NRCA). Control devices for inorganic HAPs include dry particulate filters (PF) and water wash (WW)systems.
- ⁵ Organic HAP control devices also requiring monitoring and recordkeeping but have not been addressed on this form.

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Attachment L

Sample Record Form
10 CSR 10-6.075, *Maximum Achievable Control Technology Regulations*
40 CFR Part 63, Subpart GG

Plant Name: _____ Emission Unit Number: _____ Supervisor: _____

Equipment Location				
Equipment ID		Installed: _____		
Dry Filter Booth ¹	Acceptable Pressure Drop _____ units _____	# stages: 1 (HEPA) <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>		
Water Wash Booth ¹	Acceptable Flow Rate _____ units _____			
Maintenance ²	Maintenance performed in accordance with specs or SOPs Yes <input type="radio"/> No <input type="radio"/>			
Daily Log	Reading (record once per shift)			Comments
	Shift 1	Shift 2	Shift 3	
	1			
	2			
	3			
	4			
	5			
	6			
	7			
	8			
	9			
	10			
	11			
	12			
	13			
	14			
15				

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16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

of times pressure drop or flow rate was outside specified limits (report annually): _____

1 if pressure drop or flow rate exceeds or falls below recommended value, shut down system
2 if scheduled maintenance is not performed, shut down system [monitoring requirement]

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Attachment M

Sample Record Form
10 CSR 10-6.075, *Maximum Achievable Control Technology Regulations*
40 CFR Part 63, Subpart GG
Chemical Stripping Record Keeping Form

Plant Name: _____

Shop: _____

Supervisor: _____

Inventory Date			
Part stripped ¹			
Number of aircraft			
Spot stripping ²	Yes No	Yes No	Yes No
Removed from aircraft ²	Yes No	Yes No	Yes No
Stripper Used			
Manufacturer			
Source of HAP Constituents	MSDS Testing	MSDS Testing	MSDS Testing

Organic HAP Constituents include % of each HAP						

Compliance Method ³			
Material usage (Gallons or pounds)	Actual Volume Purchase Weight	Actual Volume Purchase Weight	Actual Volume Purchase Weight
January			
February			
March			
April			

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May			
June			
July			
August			
September			
October			
November			
December			
Yearly Total (gals or lbs)			
Spot Stripping total per aircraft			

Yearly Spot Stripping (report annually instead of semi-annually):

Total volume or weight of spot stripper use in year: _____

Total # of aircraft spot stripped in a year: _____

Average volume of organic stripper per aircraft: _____

¹ Report semiannually all new and discontinued aircraft models and parts normally removed from the aircraft for each new aircraft model being repainted. Also report any new strippers or new formulations.

² use ≤ 26 gal or 190 lbs of stripper per commercial aircraft and ≤ 50 gal or 365 lbs per military aircraft.

³ If using option 3, chemical strippers with organic HAP, you must use a control device to reduce organic HAP by 81% for existing sources and 95% for new. Control devices require monitoring and recordkeeping but have not been addressed on this form.

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Attachment N

Sample Record Form
10 CSR 10-6.075, *Maximum Achievable Control Technology Regulations*
40 CFR Part 63, Subpart GG
Non-Chemical Paint Removal Record Keeping Form
(De-painting Option 2)

Plant Name: _____ Emission Unit Number: _____ Supervisor: _____

Record info in Bold

Report info in italics semi-annually Example 1

Example 2

Inventory Date	1/1/98	1/1/98		
Equipment Type	<i>Plastic media blasting</i>	<i>Plastic media blasting</i>		
Source ID	<i>BINKS Walk-in #500-1A</i>	<i>Vacu-blast 100 -3345</i>		
Work Practice Standards Operated and maintained in accordance with specs or SOPs	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
Dry Media Blasting ¹ Use closed-cycle system Use dry particulate filter Use waterwash Use baghouse	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>

Malfunction Information²

Malfunction and correction date	malfunctioned <i>10/1/98</i> corrected <i>10/12/98</i>	malfunctioned <i>10/10/98</i> corrected <i>11/10/98</i>	malfunctioned _____ corrected _____	malfunctioned _____ corrected _____
Description of malfunction	<i>magnahelic broke</i>	<i>Seal torn - media not contained</i>		

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Alternative method used during malfunction	<i>mechanical sander</i>	<i>HAP-Stripper</i> Strip Away Type 2 (MC60%)		
Date alternative started and stopped	started 10/1/98 stopped 10/12/98	started 10/10/98 stopped 11/10/98	started _____ stopped _____	started _____ stopped _____
Comments	You do not need to report alternative start/stop dates, but you must record them	<i>This would be a violation since you used HAP stripper more > 15 days</i>		

¹ if waterwash or dry particulate filter is used, see Example Pressure Drop/Water Flow Recordkeeping Form

² if malfunction occurs, do not use HAP containing strippers as substitute for no more than 15 days annually

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Sample Record Form
10 CSR 10-6.075, *Maximum Achievable Control Technology Regulations*
40 CFR Part 63, Subpart T

[illegible][illegible]

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Attachment P

Sample Record Form
10 CSR 10-6.075, *Maximum Achievable Control Technology Regulations*
40 CFR Part 63, Subpart T

Month	Monthly Emissions ¹	3-Month Rolling Average Emisisions from the Solvent Cleaning Machine

¹ Calculation sheets showing how monthly emissions and the rolling 3-month average emissions were determined should be kept with this record-keeping sheet.

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APPENDIX A

Table I:
Specialty Coating VOC Limitations from 10 CSR 10-5.295

	Pounds per Gallon	Grams per Liter
Ablative Coating	5.0	600
Adhesion Promoter	7.4	890
Adhesive Bonding Primers:		
Cured at 250°F or below	7.1	850
Cured above 250°F	8.6	1030
Adhesives:		
Commercial Interior Adhesive	6.3	760
Cyanoacrylate Adhesive	8.5	1020
Fuel Tank Adhesive	5.2	620
Nonstructural Adhesive	3.0	360
Rocket Motor Bonding Adhesive	7.4	890
Rubber-Based Adhesive	7.1	850
Structural Autoclavable Adhesive	0.5	60
Structural Nonautoclaveable Adhesive	7.1	850
Antichafe Coating	5.5	660
Bearing Coating	5.2	620
Caulking and Smoothing Compounds	7.1	850
Chemical Agent-Resistant Coating	4.6	550
Clear Coating	6.0	720
Commercial Exterior Aerodynamic Structure Primer	5.4	650
Compatible Substrate Primer	6.5	780
Corrosion Prevention Compound	5.9	710
Cryogenic Flexible Primer	5.4	645
Cryoprotective Coating	5.0	600
Dry Lubricative Material	7.3	880
Electric or Radiation-Effect Coating	6.7	800
Electrostatic Discharge and Electromagnetic Interference (EMI) Coating	6.7	800
Elevated Temperature Skydrol Resistant Commercial Primer	6.2	740
Epoxy Polyamide Topcoat	5.5	660
Fire-Resistant (interior) Coating	6.7	800
Flexible Primer	5.3	640
Flight Test Coatings:		
Missile or Single Use Aircraft	3.5	420
All Others	7.0	840
Fuel-Tank Coating	6.0	720
High-Temperature Coating	7.1	850
Insulation Covering	6.2	740

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Intermediate Release Coating	6.3	750
Lacquer	6.9	830
Maskant:		
Bonding Maskant	10.3	1230
Critical Use and Line Sealer Maskant	8.5	1020
Seal Coat Maskant	10.3	1230

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	Pounds per Gallon	Grams per Liter
Metallized Epoxy Coating	6.2	740
Mold Release	6.5	780
Optical Anti-Reflective Coating	6.3	750
Part Marking Coating	7.1	850
Pretreatment Coating	6.5	780
Rain Erosion-Resistant Coating	7.1	850
Rocket Motor Nozzle Coating	5.5	660
Scale Inhibitor	7.3	880
Screen Print Ink	7.0	840
Sealants:		
Extrudable/Rollable/Brushable Sealant	2.3	280
Sprayable Sealant	5.0	600
Silicone Insulation Material	7.1	850
Solid Film Lubricant	7.3	880
Specialized Function Coating	7.4	890
Temporary Protective Coating	2.7	320
Thermal Control Coating	6.7	800
Wet Fastener Installation Coating	5.6	675
Wing Coating	7.1	850

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APPENDIX B

63.10 Recordkeeping and reporting requirements.

(a) *Applicability and general information.*

- (1) The applicability of this section is set out in § 63.1(a)(4).
- (2) For affected sources that have been granted an extension of compliance under subpart D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.
- (3) If any State requires a report that contains all the information required in a report listed in this section, an owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.
- (4)(i) Before a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit reports to the appropriate Regional Office of the EPA (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in § 63.13).
- (ii) After a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit reports to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each report submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any reports at its discretion.
- (5) If an owner or operator of an affected source in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such source under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. For each relevant standard established pursuant to section 112 of the Act, the allowance in the previous sentence applies in each State beginning 1 year after the affected source's compliance date for that standard. Procedures governing the implementation of this provision are specified in § 63.9(i).
- (6) If an owner or operator supervises one or more stationary sources affected by more than one standard established pursuant to section 112 of the Act, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State permitting authority) a common schedule on which periodic reports required for each source shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the latest compliance date for any relevant standard established pursuant to section 112 of the Act for any such affected source(s). Procedures governing the implementation of this provision are specified in § 63.9(i).
- (7) If an owner or operator supervises one or more stationary sources affected by standards established pursuant to section 112 of the Act (as amended November 15, 1990) and standards set under part 60, part 61, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or

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operator and the Administrator (or the State permitting authority) a common schedule on which periodic reports required by each relevant (i.e., applicable) standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the relevant section 112 standard, or 1 year after the stationary source is required to be in compliance with the applicable part 60 or part 61 standard, whichever is latest. Procedures governing the implementation of this provision are specified in § 63.9(i).

(b) General recordkeeping requirements.

(1) The owner or operator of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

(2) The owner or operator of an affected source subject to the provisions of this part shall maintain relevant records for such source of --

- (i) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);
- (ii) The occurrence and duration of each malfunction of the required air pollution control and monitoring equipment;
- (iii) All required maintenance performed on the air pollution control and monitoring equipment;
- (iv) Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see § 63.6(e)(3));
- (v) All information necessary to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan (see § 63.6(e)(3)) when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist," or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events);
- (vi) Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);
- (vii) All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);
 - (A) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS

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records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(B) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(C) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (b)(2)(vii), if the administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

(viii) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;

(ix) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;

(x) All CMS calibration checks;

(xi) All adjustments and maintenance performed on CMS;

(xii) Any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements under this part, if the source has been granted a waiver under paragraph (f) of this section;

(xiii) All emission levels relative to the criterion for obtaining permission to use an alternative to the relative accuracy test, if the source has been granted such permission under § 63.8(f)(6); and

(xiv) All documentation supporting initial notifications and notifications of compliance status under § 63.9.

(3) *Recordkeeping requirement for applicability determinations.* If an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f), and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under this part) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the

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Administrator to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of this part for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with EPA guidance materials published to assist sources in making applicability determinations under section 112, if any. The requirements to determine applicability of a standard under § 63.1(b)(3) and to record the results of that determination under paragraph (b)(3) of this section shall not by themselves create an obligation for the owner or operator to obtain a title V permit.

(d) General reporting requirements.

- (1) Notwithstanding the requirements in this paragraph or paragraph (e) of this section, the owner or operator of an affected source subject to reporting requirements under this part shall submit reports to the Administrator in accordance with the reporting requirements in the relevant standard(s).
- (2) Reporting *results of performance tests*. Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of any performance test under § 63.7 to the Administrator. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of a required performance test to the appropriate permitting authority. The owner or operator of an affected source shall report the results of the performance test to the Administrator (or the State with an approved permit program) before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator. The results of the performance test shall be submitted as part of the notification of compliance status required under § 63.9(h).
- (3) Reporting *results of opacity or visible emission observations*. The owner or operator of an affected source required to conduct opacity or visible emission observations by a relevant standard shall report the opacity or visible emission results (produced using Test Method 9 or Test Method 22, or an alternative to these test methods) along with the results of the performance test required under § 63.7. If no performance test is required, or if visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the performance test required under § 63.7, the owner or operator shall report the opacity or visible emission results before the close of business on the 30th day following the completion of the opacity or visible emission observations.
- (4) *Progress reports*. The owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under § 63.6(i) shall submit such reports to the Administrator (or the State with an approved permit program) by the dates specified in the written extension of compliance.
- (5)(i) *Periodic startup, shutdown, and malfunction reports*. If actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan [see § 63.6(e)(3)], the owner or operator shall state such information in a startup, shutdown, and malfunction report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period, and they must include the number, duration,

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and a brief description of each startup, shutdown, or malfunction. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, that shall be submitted to the Administrator semiannually (or on a more frequent basis if specified otherwise in a relevant standard or as established otherwise by the permitting authority in the source's title V permit). The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate). If the owner or operator is required to submit excess emissions and continuous monitoring system performance (or other periodic) reports under this part, the startup, shutdown, and malfunction reports required under this paragraph may be submitted simultaneously with the excess emissions and continuous monitoring system performance (or other) reports. If startup, shutdown, and malfunction reports are submitted with excess emissions and continuous monitoring system performance (or other periodic) reports, and the owner or operator receives approval to reduce the frequency of reporting for the latter under paragraph (e) of this section, the frequency of reporting for the startup, shutdown, and malfunction reports also may be reduced if the Administrator does not object to the intended change. The procedures to implement the allowance in the preceding sentence shall be the same as the procedures specified in paragraph (e)(3) of this section.

- (ii) *Immediate startup, shutdown, and malfunction reports.* Notwithstanding the allowance to reduce the frequency of reporting for periodic startup, shutdown, and malfunction reports under paragraph (d)(5)(i) of this section, any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under this paragraph shall consist of a telephone call (or facsimile (FAX) transmission) to the Administrator within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred. Notwithstanding the requirements of the previous sentence, after the effective date of an approved permit program in the State in which an affected source is located, the owner or operator may make alternative reporting arrangements, in advance, with the permitting authority in that State. Procedures governing the arrangement of alternative reporting requirements under this paragraph are specified in § 63.9(i).

(f) Waiver of recordkeeping or reporting requirements.

- (1) Until a waiver of a recordkeeping or reporting requirement has been granted by the Administrator

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- under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.
- (2) Recordkeeping or reporting requirements may be waived upon written application to the Administrator if, in the Administrator's judgment, the affected source is achieving the relevant standard(s), or the source is operating under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.
 - (3) If an application for a waiver of recordkeeping or reporting is made, the application shall accompany the request for an extension of compliance under § 63.6(i), any required compliance progress report or compliance status report required under this part (such as under § 63.6(i) and § 63.9(h)) or in the source's title V permit, or an excess emissions and continuous monitoring system performance report required under paragraph (e) of this section, whichever is applicable. The application shall include whatever information the owner or operator considers useful to convince the Administrator that a waiver of recordkeeping or reporting is warranted.
 - (4) The Administrator will approve or deny a request for a waiver of recordkeeping or reporting requirements under this paragraph when he/she --
 - (i) Approves or denies an extension of compliance; or
 - (ii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or
 - (iii) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.
 - (5) A waiver of any recordkeeping or reporting requirement granted under this paragraph may be conditioned on other recordkeeping or reporting requirements deemed necessary by the Administrator.
 - (6) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

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STATEMENT OF BASIS

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Part 70 Operating Permit Application, received date;
- 2) 2001 Emissions Inventory Questionnaire, received March 29, 2002;
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.
- 4) Part 70 Operating Permit, OP1999-052
- 5) Letter 464C-BSS-4845 sent by Bret Spoerle of the McDonnell Douglas Corporation, a wholly subsidiary of The Boeing Company on November 12, 1999

Applicable Requirements Included in the Operating Permit but Not in the Application

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

10 CSR 10-6.180, *Measurement of Emissions of Air Contaminants*,

This rule has been included in the operating permit in order to provide citing for the allowance of requests for emissions data results. On past forms issued by the Air Pollution Control Program, including the application for this permit, it was automatically marked as an administrative rule not required to be listed as an applicable requirement. It is no longer judged to be solely administrative and is, therefore, included in the operating permit.

10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*

This rule had not been created at the time of application; however, it has been determined to be applicable to the installation and, therefore, has been included in the operating permit.

Missouri Air Conservation Law, Asbestos Abatement, 643.225 through 643.250;

10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants, Subpart M, National Standards for Asbestos; and

10 CSR 10-6.250, Asbestos Abatement Projects - Certification, Accreditation, and Business Exemption Requirements

The installation is subject to these regulations if they undertake any projects that deal with or involve any asbestos containing materials. In the installation's operating projects were underway at the time of this review that deal with or involve asbestos containing material at this installation. Therefore, the above regulations were

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not cited in the operating permit.

If the installation should undertake any construction or demolition projects in the future that deal with or involve any asbestos containing materials, the installation must follow all of the applicable requirements of the above rules related to that specific project.

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

10 CSR 10-5.050, *Restriction of Emission of Particulate Matter From Industrial Processes*

This rule was rescinded from the Missouri Air Rules and Regulations as of March 30, 2001. This regulation has been replaced by 10 CSR 10-6.400, *Restriction of Emissions of Particulate Matter from Industrial Processes*

10 CSR 10-5.100, *Preventing Particulate Matter from Becoming Airborne*

This rule was rescinded from the Missouri Air Rules and Regulations as of September 20, 1990.

10 CSR 10-5.150, *Emission of Certain Sulfur Compounds Restricted*

This rule was rescinded from the Missouri Air Rules and Regulations as of July 30, 1997.

10 CSR 10-5.110, *Restriction of Emission of Sulfur Dioxide for Use of Fuel*

This rule was rescinded from the Missouri Air Rules and Regulations as of July 30, 1997.

10 CSR 10-5.180, *Emission of Visible Air Contaminants from Internal Combustion Engine*

This rule was rescinded from the Missouri Air Rules and Regulations as of November 30, 2002.

10 CSR 10-5.443, *Control of Gasoline Reid Vapor Pressure*

This rule was rescinded from the Missouri Air Rules and Regulations as of January 30, 2003.

10 CSR 10-6.240, *Asbestos Abatement Projects-Registration, Notification and Performance Requirements*

This rule has not been included in the operating permit because the rule was struck down in the Cole County circuit court.

Construction Permit Revisions

1. Construction Permit #0396-022

The original construction permit was written to include the Mixing Paint Booth (EU0130), the Drying Rack (EU0400), Ovens OV-598-03 through OV-598-05, the ink stamping process (EU0550), the conformal coating process (EU0560), and various soldering process (EU0570) in Special Condition 1. All of these emission units have been removed from the installation and are no longer subject to this

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Construction Permit. Boeing informed the Air Pollution Control Program about the removal of these emission units in a letter dated November 12, 1999. On February 8, 2000, the Air Pollution Control Program sent a response letter indicating that Construction Permit #0396-022 would not be modified. However, the letter further states that the revisions to remove these units will be completed in the Operating Permit renewal. This amendment letter was labeled as Construction Permit #0396-022A. All references to these units have been removed from the Operating Permit and Special Condition 1 has been revised to reflect all units that are still in use at the installation. If the installation chooses to re-install any of these units, the installation would be required to obtain a new Construction Permit and submit for an Operating Permit Modification.

Special Condition 1 from Construction Permit #0396-022 states that the permit should apply to all Secret Coating Booths SB598-01 through SB598-09 inclusive. This range would then include the Spray Booths labeled as SB598-06 (EU0140) and SB598-07. However, under the Applicable Requirements section of Construction Permit #0396-022, it is stated that the spray booths to which the construction permit applies to are SB598-01 through SB598-05, SB598-08, SB598-09, and SB599-01. Since SB598-06 and SB598-07 are not among this list, Construction Permit #0396-022 is not applicable to these emission units.

2. Construction Permit #0396-014

This Construction Permit was issued as being applicable to Emission Units CC-598-02 and CC-598-03. In a letter dated November 12, 1999, the installation informed the APCP these units had been removed and replaced with Emission Unit EU0020 (CC-505-01). On February 8, 2000, the Air Pollution Control Program responded in an amendment letter approving the reclassification of both CC598-02 and CC598-03 to CC505-01. The letter further states that Construction Permit #0396-014 would not be modified but that the revisions would be made in the Operating Permit upon renewal. The letter was labeled as Construction Permit #0396-014A. The Operating Permit has been written with Construction Permit #0396-014 applying to CC-505-01, which is EU0020.

3. Construction Permit #0396-014

Special Condition 4 was included in Construction Permit #0396-014 instructing the installation to remove Vapor Degreaser (VD) 500-02, VD 500-03, VD 500-04, and VD 500-05. The installation has removed these units, therefore the permit condition has not been included in the Operating Permit.

4. Construction Permit #0396-014

Special Condition 5 lists emission units that had already been removed from the installation before the issuance of Construction Permit #0396-014. Since the units had already been removed and are currently no longer at the installation, Special Condition 5 has not been included in the Operating Permit.

NSPS Applicability

40 CFR Part 60, Subpart Kb- *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984*

This subpart is applicable to emission unit EU0360, since the storage tank stores volatile organic liquid and has a capacity over 10, 600 gallons.

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40 CFR Part 60, Subpart Kb- *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984*

This subpart is not applicable to emission unit EU0340, even though the storage tank stores volatile organic liquid. The capacity of the storage tank is 1,000 gallons, which is under the 10,600 gallons capacity lower limit. Since EU0340 is not over the capacity limit, this subpart has not been applied to this emission unit.

MACT Applicability

40 CFR Part 63, Subpart GG- *National Emission Standards for Aerospace Manufacturing and Rework Facilities*

Since the installation is an aerospace manufacturer, this subpart is applicable. The units to which this subpart applies are EU0010, EU0030, EU0060 through EU0120, EU0230 through EU0240, and EU0330.

40 CFR Part 63, Subpart GG- *National Emission Standards for Aerospace Manufacturing and Rework Facilities*

As provided by 40 CFR §§63.10(a)(5), 63.9(i), and 40 CFR §63.753(a)(3). The General Provisions to the NESHAP regulations provide:

If an owner or operator of an affected source in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such source under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State...Procedures governing the implementation of this provision are specified in §63.9(i).

The current Aerospace NESHAP reporting periods resulted from the timing of the implementation of 40 CFR Part 63, Subpart GG and the May 1, 1999 due date of the Initial Notification of Compliance Status submittal required by that regulation and the General Provisions (40 CFR §63.9(h)). Semi-Annual reports thereafter are due on November 1 (for reporting periods covering March 1 through August 31) and May 1 (for reporting periods covering September 1 through February 28) of each year. Annual reports are due May 1 (for the March 1 through February 28 reporting periods) of each year. On February 7, 2000 Boeing requested permission to align the Aerospace NESHAP with the Title V reporting periods and submission dates as follows:

1. Due on April 1 of each year: Title V Annual Compliance Certification and Aerospace NESHAP Annual Report, for the period of January through December.
2. Due on April 1 of each year: Title V Semi-annual Monitoring Report and Aerospace NESHAP Semi-annual Report, for the period of July through December.
3. Due of October 1 of each year: Title V Semi-annual Monitoring Report and

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Aerospace NESHAP Semi-annual Report, for the period of January through June."

On March 21, 2000, the APCP accepted the alignment schedule for the Title V and Aerospace

40 CFR Part 63, Subpart GG- *National Emission Standards for Aerospace Manufacturing and Rework Facilities*

A control system is defined in 40 CFR Part 63, Subpart GG as a combination of pollutant capture system(s) and control device(s) used to reduce discharge to the atmosphere of organic HAP or VOC emissions generated by a regulated operation. The emission units are equipped with fabric filters that are control devices. The fabric filters are only used for the removal of particulate matter and inorganic HAP material. The fabric filters are not set up as a capture system that would be defined as a control system. The HAP emissions that are captured by the control devices are inorganic HAPs, which are not required to have a control system that reduces emissions to the atmosphere. 40 CFR Part 63, Subpart GG only requires that a required 81% reduction of emissions to the atmosphere from organic HAPs and VOC which are controlled by a control system. The organic HAPs and VOC emissions are uncontrolled and not subject to either a control device or control system. Therefore, the installation does not have a control system and would not be subject to the requirements under §63.745(d).

40 CFR Part 63, Subpart GG- *National Emission Standards for Aerospace Manufacturing and Rework Facilities*

Emission Unit EU0140 is not used for 40 CFR Part 63, Subpart GG, and therefore the requirements under this Subpart do not apply to this unit. In addition, Emission Unit 0150 has been removed from the installation, and has also been removed from the permit. If EU0140 is ever used in the future for the 40 CFR Part 63, Subpart GG, the installation would be required to apply for a Significant Operating Permit Modification.

40 CFR Part 63, Subpart GG- *National Emission Standards for Aerospace Manufacturing and Rework Facilities*

The requirements from §63.746(b)(4) have been included in Permit Condition (EU0230 through EU0240)-001 since the installation does dry media blasting. Since the installation uses a baghouse for control and not a dry particulate system, the requirements from §63.746(b)(4)(iii) for a dry particulate system have not been included in the permit condition. Additionally, the requirements for §63.746(b)(4)(iv) have not been included, since the installation does not utilize a water wash system. §63.746(b)(4)(v) deals with the compliance methods for a dry particulate system and a water wash system. Since the installation uses a baghouse, §63.746(b)(4)(v) is not applicable to the installation. Since the installation does not have a control system, the requirements from §63.746(c) are not applicable to the installation. The requirements of §63.752(e)(2) are not applicable to the installation since the installation does not have a carbon absorber. Since the installation does not have a control system, the requirements from §63.752(3) are not applicable to the installation. The requirements of §63.752(e)(7) are not applicable to the installation since the regulation is for particulate filters and water wash systems, neither of which is utilized by the installation. Since §63.753(d)(1)(vii) and

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§63.753(d)(2)(ii) deals with parameters that are consistent with dry particulate filters and water wash systems and since the installation does not use either system, the requirements from this regulation has not been included in the Permit Condition.

40 CFR Part 63, Subpart GG- *National Emission Standards for Aerospace Manufacturing and Rework Facilities*

Cold Cleaners (EU0020) are used by the permittee to clean electronic parts. The cleaning of electronic parts are exempted from the requirements of §63.744(b), *Hand-wipe cleaning*, by §63.744(e)(4). The cold cleaners would be subject to §63.744 of 40 CFR Part 63, Subpart GG. §63.744 are the standards for Cleaning Operations. However, the cold cleaners do not fit the definition of the Cleaning Operations. Under §63.742, the definition of Cleaning Operations is spray gun, hand-wipe, and flush cleaning operations. Since the cold cleaners do not fit the definition of Cleaning Operations, §63.744 is not applicable to EU0020. Therefore, 40 CFR Part 63, Subpart GG does not apply to the Cold Cleaners (EU0020).

40 CFR Part 63, Subpart GG- *National Emission Standards for Aerospace Manufacturing and Rework Facilities*

Under §63.743(b) of 40 CFR Part 63, Subpart GG the permittee is required to submit a startup, shutdown, and malfunction plan. The permittee submitted the required plan on April 4, 2000 to the Director. Since the startup, shutdown, and malfunction plan has been submitted, as required by 40 CFR Part 63, Subpart GG, the requirements of §63.743(b) have not been included in the operating permit.

The permittee is also required to do notification requirements which are required by 40 CFR 63.9 and 40 CFR 63.753(a)(1). The permittee has submitted the Notification of Compliance Status Report to the Director on April 12, 1999. In addition, the permittee submitted on September 9, 1999, a letter which contained changes to the information in the initial Notification of Compliance Status Report. These reports cover the requirements of §63.9 and §63.753(a)(1), therefore these regulations have not been included in the operating permit.

An initial notification report was also required by §63.753(a)(2). This report was submitted, by the permittee, to EPA Region VII on December 22, 1995. Therefore, the requirements of §63.753(a)(2) have not been included in the operating permit.

40 CFR Part 63, Subpart T- *Halogenated Solvent Cleaning*

The units to which this subpart applies is EU0370. Subpart T has been included into the Operating Permit under Permit Condition EU0370-002.

40 CFR Part 63, Subpart T- *Halogenated Solvent Cleaning*

Paragraphs (f) and (g) of section 63.465 have not been included in the Permit Condition EU0370-002. Paragraphs (f) and (g) deal with compliance for continuous web cleaning machines. The installation does not have or use these type of machines, and thus neither paragraph is applicable to the installation.

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40 CFR Part 63, Subpart T- *Halogenated Solvent Cleaning*

In section §63.465(c)(1) and §63.465(c)(3) of 40 CFR Part 63, Subpart T, there are references to compliance for vapor degreasers without a solvent/air interface. These references have not been included in Permit Condition EU0370-002 since the installation does not utilize vapor degreasers without a solvent/air interface. The vapor degreaser does have a solvent air interface.

40 CFR Part 63, Subpart T- *Halogenated Solvent Cleaning*

The methodology for calculating emissions is provided by formula in 40 CFR §63.465(c). However, it should be noted that Boeing does not remove solid waste described as "SSR(i)" in 40 C.F.R. §63.465(c)(1) from the vapor degreasers subject to 40 C.F.R. Part 63, Subpart T. The liquid solvent described as LSR(i) in 40 C.F.R. §63.465(c)(1) could be contaminated with solids, grease, water, and other materials. In order to address this problem, EPA Region VII has issued a letter determination regarding how to make this calculation, dated March 12, 1997 and published in the Applicability Determination Index, Control Number M970030. According to this guidance, "when calculating the amount of halogenated HAP liquid solvent removed from a solvent cleaning machine, EPA suggests using the same halogenated HAP concentration of the liquid removed as that of the liquid added to the machine.

40 CFR Part 63, Subpart T- *Halogenated Solvent Cleaning*

Under §63.468(a) of 40 CFR Part 63, Subpart T, the permittee is required to submit an Initial Notification Report to the Director. The permittee has submitted the Initial Notification Report for Existing Machines, therefore the requirements of §63.468(a) has not been included in the operating permit.

40 CFR Part 63, Subpart JJ- *National Emission Standards for Hazardous Air Pollutants for Wood Furniture Manufacturing Operations*

The installation is defined as being an incidental wood manufacturer. An incidental wood manufacture is a major source that is primarily engaged in the manufacture of products other than wood furniture or wood furniture components and that uses no more than 100 gallons per month of finishing material or adhesives in the manufacture of wood furniture or wood furniture components. The only applicable requirement from 40 CFR Part 63, Subpart JJ is §63.800(a).

40 CFR Part 63, Subpart Q- *National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers*

40 CFR Part 63, Subpart Q applies to all new and existing industrial process cooling towers that are operated with chromium-based water treatment chemicals on or after September 8, 1994 and are either major sources or are integral parts of facilities that are major sources. However, the installation's cooling towers are not operated with chromium-based water treatment chemicals. Therefore, this subpart is not applicable to the installation.

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NESHAP Applicability

40 CFR Part 61, Subpart M, *National Emission Standard for Asbestos*, applies to the installation because of the renovation and demolition parts of the subpart which makes the subpart applicable to all sources. It is included as a core permit requirement.

Other Regulatory Determinations

- 10 CSR 10-5.030, *Maximum Allowable Emission of Particulate Matter for Fuel Burning Equipment Used for Indirect Heating*

Existing Sources:

The following table lists all of the existing heating units within the installation. The table is from correspondence from the installation dated August 3, 1998.

Table 1: Existing Heating Units

Emission Unit	EIQ Point Number	Emission Unit Number	Description	Heat Input Rating (MMBTU/hr)	AP-42 Emission Factor for PM (lb/MMBTU)
EU0410	CS-STC-01	CS-STC-01A	Boiler (Loop 23)	6.00	0.012
EU0420	CS-STC-01	CS-STC-01A	Boiler (Front Office)	4.19	0.012
EU0430	CS-STC-01	CS-STC-01A	Make-up Air Unit #47 (Café)	2.11	0.012
EU0440	CS-STC-01	CS-STC-01A	Unit Heater #5 (Col. M-17)	1.25	0.012
EU0450	CS-STC-01	CS-STC-01A	Make-up Air Unit Paint Booth	2.00	0.012
-	CS-STC-01	CS-STC-01A	5 Radiant Heaters (Shipping Dock) (0.05 MMBTU/hr each)	0.25	0.011
-	CS-STC-01	CS-STC-01A	AHU #11 Fan (Room 4)	0.98	0.012
-	CS-STC-01	CS-STC-01A	AHU #12 Fan (Room 5)	0.20	0.011
-	CS-STC-01	CS-STC-01A	AHU #13 Fan (Room 6)	0.40	0.012
-	CS-STC-01	CS-STC-01A	AHU #16 Fan (Room 7)	0.40	0.012
-	CS-STC-01	CS-STC-01A	AHU #17 Fan (Room 8)	0.40	0.012
-	CS-STC-01	CS-STC-01A	AHU #19 Fan (Room 9)	0.40	0.012
-	CS-STC-01	CS-STC-01A	AHU #21 Fan (Room 10)	0.40	0.012
-	CS-STC-01	CS-STC-01A	RTU-#42	0.55	0.012
-	CS-STC-01	CS-STC-01A	RTU-#43	0.69	0.012
-	CS-STC-01	CS-STC-01A	RTU-#44	0.87	0.012
-	CS-STC-01	CS-STC-01A	AHU #37 Fan (Room 2)	0.34	0.012
-	CS-STC-01	CS-STC-01A	AHU #40 Fan (Room 2)	0.50	0.012
-	CS-STC-01	CS-STC-01A	AHU #82 – Kitchen Fan (Room 2)	0.85	0.012

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-	CS-STC-01	CS-STC-01A	Roof Top Unit #35 (Insp/Receiving)	0.36	0.012
-	CS-STC-01	CS-STC-01A	Roof Top Unit #36 (Lower Mezzanine)	0.45	0.012
-	CS-STC-01	CS-STC-01A	Roof Top Unit #41 (Personnel)	0.45	0.012
-	CS-STC-01	CS-STC-01A	Roof Top Unit #51 (Computer Room & Library)	0.36	0.012
-	CS-STC-01	CS-STC-01A	Roof Top Unit #52 (CAAD)	0.48	0.012
-	CS-STC-01	CS-STC-01A	Roof Top Unit #53 (Vital High Tech)	0.60	0.012
-	CS-STC-01	CS-STC-01A	Unit Heater (N. Attic & Shop Chute)	0.20	0.011
-	CS-STC-01	CS-STC-01A	Unit Heater (North Attic)	0.40	0.012
-	CS-STC-01	CS-STC-01A	Unit Heater (S. Equip Room)	0.10	0.011
-	CS-STC-01	CS-STC-01A	Unit Heater (Walkway)	0.15	0.011
-	CS-STC-01	CS-STC-01A	Unit Heater (Old PWB)	0.40	0.012
-	CS-STC-01	CS-STC-01A	Unit Heater (South Restroom)	0.13	0.011
-	CS-STC-01	CS-STC-01A	AHU #24-6 Conformal Coat	0.30	0.012
-	CS-STC-01	CS-STC-01A	Water Heater (Jackson)(HUD)	0.04	0.011
-	CS-STC-01	CS-STC-01A	Water Heater (PWB & Engineering)	0.65	0.012
-	CS-STC-01	CS-STC-01A	Water Heater (Tele-Laars, Rm 62)	0.35	0.012
-	CS-STC-01	CS-STC-01A	Water Heater (A.O. Smith, Rm 273)	0.16	0.011
-	CS-STC-01	CS-STC-01A	Water Heater Rheem (Rm 291)	0.42	0.012
-	CS-STC-01	CS-STC-01A	6 Roof Top Units (62-67), Machine Shop (0.85 MMBTU/hr ea.)	5.10	0.012
-	CS-STC-01	CS-STC-01A	Roof Top Unit 34 (Vital Engineering)	0.25	0.011
-	CS-STC-01	CS-STC-01A	Roof Top Unit 45 (Vital Engineering)	0.20	0.011
-	CS-STC-01	CS-STC-01A	Roof Top Unit 68 (Computer Maintenance)	0.23	0.011
-	CS-STC-01	CS-STC-01A	Roof Top Unit 54 (Vital Engineering)	0.23	0.011
-	CS-STC-01	CS-STC-01A	Fire Pump House Boiler	0.60	0.012
EU0460	CS-STC-01	CS-STC-01A	Roof Top Unit Renzor	1.25	0.012
-	CS-STC-01	CS-STC-01A	2 Roof Top Units (1 and 2)(0.275 MMBTU/hr ea.)	0.55	0.011
-	CS-STC-01	CS-STC-01A	Roof Top Unit 3	0.36	0.012
-	CS-STC-01	CS-STC-01A	2 Roof Top Units (4 and 5)(0.125 MMBTU/hr ea.)	0.25	0.011
-	CS-STC-01	CS-STC-01A	Roof Top Unit 6	0.13	0.011
-	CS-STC-01	CS-STC-01A	Unit Heater	0.80	0.012
Total Q for Existing Sources				38.73	

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Using the equation from 10 CSR 10-5.030 (2)(B)2, the emission limitation is found to be 0.42 pounds per million BTU of heat input. The equation is:

$$E = 1.09(Q)^{-0.259}$$

Where

E = the maximum allowable particulate emission rate in pounds per million BTU of heat input, rounded off to two (2) decimal places; and

Q = the installation heat input in millions of BTU per hour.

New Sources:

The following table lists all of the new heating units within the installation. The table is from correspondence from the installation dated August 3, 1998.

Table 2: New Heating Units

Emission Unit	EIQ Point Number	Emission Unit Number	Description	Heat Input Rating (MMBTU/hr)	AP-42 Emission Factor for PM (lb/MMBTU)
-	CS-STC-01	CS-STC-01A	AHU (A Section of Building)	0.40	0.012
-	CS-STC-01	CS-STC-01A	Water Heater (A Section of Building)	0.04	0.011
EU0470	CS-STC-01	CS-STC-01A	AHU (B Section of Building)	1.25	0.012
-	CS-STC-01	CS-STC-01A	Water Heater (B Section of Building)	0.04	0.011
-	CS-STC-01	CS-STC-01A	Duct Heaters	0.20	0.011
-	CS-STC-01	CS-STC-01A	Unit Heater (Auto Repair Shop)	0.13	0.011
-	CS-STC-01	CS-STC-01A	Water Heater (C Section & Café)	0.54	0.012
-	CS-STC-01	CS-STC-01A	Water Heater (D Section of Building)	0.04	0.011
EU0480	CS-STC-01	CS-STC-01A	Boiler #1	5.23	0.012
EU0490	CS-STC-01	CS-STC-01A	Boiler #2	5.23	0.012
-	CS-STC-01	CS-STC-01A	Unit Heater Renzor	0.40	0.012
-	CS-STC-01	CS-STC-01A	Unit Heater Renzor	0.40	0.012
-	CS-STC-01	CS-STC-01A	Unit Heater Renzor	0.40	0.012
-	CS-STC-01	CS-STC-01A	Water Heater	0.04	0.011
EU0160	CS-STC-01	CS-STC-01A	Natural Gas waste liquid reduction system	10.00	0.014
EU0500	CS-STC-01	CS-STC-01A	Roof Top Unit	1.25	0.012
EU0510	CS-STC-01	CS-STC-01A	Fire Pump House Boiler	1.28	0.012
EU0170	CS-598-01	CS-598-01	Natural Gas/Fuel Oil Cleaver Brooks Boiler #1	20.92	0.014

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EU0180	CS-598-02	CS-598-02	Natural Gas/Fuel Oil Cleaver Brooks Boiler #2	20.92	0.014
EU0190	CS-STC-01	CS-598-03	Natural Gas/Fuel Oil Cleaver Brooks Boiler #3	6.275	0.014
EU0200	CS-STC-01	CS-598-04	Natural Gas/Fuel Oil Cleaver Brooks Boiler #4	6.275	0.014
EU0520	CS-STC-01	CS-STC-01A	Standby Boiler	1.50	0.012
-	CS-STC-01	CS-STC-01A	Space Heater Renzor	0.13	0.011
-	CS-STC-01	CS-STC-01A	3 Space Heaters (0.65 MMBTU/hr -ea.)	1.95	0.012
-	CS-STC-01	CS-STC-01A	Water Heater	0.10	0.011
-	CS-STC-01	CS-STC-01A	2 Drying Ovens (0.8 MMBTU/hr ea.)	1.60	0.012
-	CS-STC-01	CS-599-01 to -02	2 Natural Gas/Fuel Oil Cleaver Brooks Boilers (5.23 MMBTU/hr ea.)	10.46	0.012
-	CS-STC-01	CS-STC-01A	Cleaver Brooks Standby Boiler	1.50	0.012
EU0530	CS-STC-01	CS-STC-01A	Miscellaneous Small Combustion Sources	4.45	0.012
Total Q for New Sources				102.95	

As stated in 10 CSR 10-5.030 (3)(A), the total heat input of all new and existing indirect heating sources within an installation shall be used to determine the maximum allowable particulate emission rate which is to be applied to each new indirect heating source within the installation.

The value for Q applied for new indirect heating sources would be 141.68 MMBTU/hr. This value is found from adding the total Q for existing sources to the total Q for new sources.

Using the equation from 10 CSR 10-5.030 (3)(B)2, the emission limitation is found to be 0.18 pounds per million BTU of heat input. The equation is:

$$E = 0.80(Q)^{-0.301}$$

Where

E = the maximum allowable particulate emission rate in pounds per million BTU of heat input, rounded off to two (2) decimal places; and

Q = the installation heat input in millions of BTU per hour.

Table 3: Emission Limitation and Potential to Emit Calculation for all Units subject to 10 CSR 10-5.030

Unit	Fuel	Maximum Hourly Design Rate ¹	Emission Factor ²	Boiler Heat Capacity (MMBtu/hr)	Potential Emission Rate ³ (lbs/MMBtu)	Emission Limitation (lbs/MMBtu)

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EU0160	Natural Gas	0.0012	7.6	1.25	0.007	0.18
EU0170	Natural Gas	0.020	7.6	20.92	0.007	0.18
	Fuel Oil No. 2	0.149	2.00	20.92	0.014	0.18
EU0180	Natural Gas	0.020	7.6	20.92	0.007	0.18
	Fuel Oil No. 2	0.149	2.00	20.92	0.014	0.18
EU0190	Natural Gas	0.005	7.6	6.275	0.007	0.18
	Fuel Oil No. 2	0.004	2.00	6.275	0.014	0.18
EU0200	Natural Gas	0.005	7.6	6.275	0.007	0.18
	Fuel Oil No. 2	0.004	2.00	6.275	0.014	0.18
EU0210	Natural Gas	0.010	7.6	10.46	0.007	0.18
	Fuel Oil No. 2	0.075	2.00	10.46	0.014	0.18
EU0220	Natural Gas	0.010	7.6	10.46	0.007	0.18
	Fuel Oil No. 2	0.075	2.00	10.46	0.014	0.18
EU0410	Natural Gas	0.0057	7.6	6.00	0.007	0.42
EU0420	Natural Gas	0.0040	7.6	4.19	0.007	0.42
EU0430	Natural Gas	0.0020	7.6	2.11	0.007	0.42
EU0440	Natural Gas	0.0012	7.6	1.25	0.007	0.42
EU0450	Natural Gas	0.0019	2.00	2.00	0.014	0.42
EU0460	Natural Gas	0.0012	7.6	1.25	0.007	0.42
EU0470	Natural Gas	0.0012	7.6	1.25	0.007	0.18
EU0480	Natural Gas	0.0050	7.6	5.23	0.007	0.18
EU0490	Natural Gas	0.0050	7.6	5.23	0.007	0.18
EU0500	Natural Gas	0.0012	7.6	1.25	0.007	0.18
EU0510	Natural Gas	0.0012	7.6	1.28	0.007	0.18
EU0520	Natural Gas	0.0014	7.6	1.50	0.007	0.18
EU0530	Natural Gas	0.0042	7.6	4.45	0.007	0.18

¹Natural Gas: 1050 MMBtu/MMCF

Units: MMCF/hr

Fuel Oil: 140 MMBtu/10³ gallons

Units: 10³ gallons/hr

²Natural Gas: Emission Factor Source = AP42 Sec 1.4 (7/98)

Units: lb PM/MMCF

Fuel Oil: Emission Factor Source = AP42 Sec. 1.3 (9/98)

Units: lb PM/10³ gallons

³Potential PM Emission Rate = Max. Hourly Design Rate (units/hr) * Emission Factor (lb/units) * (1/Boiler Heat Capacity [MMBtu/hr])

2. 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes*

For the purposes of determining the limits for 10 CSR 10-6.400 and 10 CSR 10-6.260, the following calculations were made:

EU0060

Draft

Emission Unit #SB-598-01

EIQ: CL-STC-01

Coating Line

PM emissions controlled with a fabric filter:

Maximum Design Rate = 56.25 lb/hr

0.028 tons/hr

Solids Content (%Wt) = 78

Transfer Efficiency = 65%

Control Efficiency = 90%

Exhaust Stack Temperature (T) = 77°F

Exhaust Flow Rate = 36,300 ACFM

Potential PM Concentration:

Emission factor =

The emission factor was found from the coating with the highest percent solids by weight (78%):

$$\text{Emission Factor} = (X\% \text{ solids}/100)(2000) = (78/100)(2000) = 1560 \text{ lbPM/ton}$$

PM uncontrolled emissions =

$$\frac{[(0.028 \text{ ton/hr}) \times (1560 \text{ lbs/ton}) \times (1 - .65) \times (7,000 \text{ gr/lb})]}{[(35,692 \text{ scf/min}) \times (60 \text{ min/hr})]} = 0.050 \text{ gr/scf}$$

PM controlled emissions =

$$\text{Emission Rate} = (\text{MHDR})(\text{Emission Factor}) \left(1 - \frac{\text{Transfer eff.}}{100}\right) \left[1 - \left(\frac{\text{Capture eff.}}{100}\right) \left(\frac{\text{Control eff.}}{100}\right)\right]$$

$$\text{Emission Rate} = (0.028)(1560) \left(1 - \frac{65}{100}\right) \left[1 - \left(\frac{100}{100}\right) \left(\frac{90}{100}\right)\right] = 1.53 \text{ lb/hr}$$

The exhaust gas rate was given by the permittee as 36,300 ACFM at a temperature of seventy-seven degrees Fahrenheit (77°F). The following conversion was made:

$$\frac{36,300 \text{ ACFM} \times 528^\circ R}{(77 + 460)^\circ R} = 35,692 \text{ SCFM}$$

SCFM = standard cubic feet per minute

Draft

ACFM = actual cubic feet per minute

The allowable PM concentration at 35,692 SCFM from Table I of 10 CSR 10-6.400 is 0.059 gr/scf (by interpolation).

$$\text{Emission Rate (grain / SCF)} = \frac{\text{Emission Rate (lb / hr)} \times 7000 (\text{grain / lb})}{\text{Exhaust gas rate (SCFM)} \times 60 (\text{min / hr})}$$

$$\text{Emission Rate (grain / SCF)} = \frac{1.53 (\text{lb / hr}) \times 7000 (\text{grain / lb})}{35,692 (\text{SCFM}) \times 60 (\text{min / hr})} = 0.005$$

The unit is in compliance since 0.005 grain/SCF is less than 0.059 grain/SCF.

EU0070 & EU0080

Emission Unit #SB-598-02 & SB-598-03

EQ: CL-STC-01

Coating Line

PM emissions controlled with a fabric filter:

Maximum Design Rate = 56.25 lb/hr

0.028 tons/hr

Solids Content (%Wt) = 78

Transfer Efficiency = 65%

Control Efficiency = 90%

Exhaust Stack Temperature (T) = 77°F

Exhaust Flow Rate = 55,850 ACFM

Potential PM Concentration:

Emission factor =

The emission factor was found from the coating with the highest percent solids by weight (78%):

$$\text{Emission Factor} = (\text{X\% solids}/100)(2000) = (78/100)(2000) = 1560 \text{ lbPM/ton}$$

PM uncontrolled emissions =

$$\frac{[(0.028 \text{ ton / hr}) \times (1560 \text{ lbs / ton}) \times (1 - .65) \times (7,000 \text{ gr / lb})]}{[(54,914 \text{ scf / min}) \times (60 \text{ min / hr})]} = 0.032 \text{ gr/scf}$$

PM controlled emissions =

Draft

$$\text{Emission Rate} = (\text{MHDR})(\text{Emission Factor}) \left(1 - \frac{\text{Transfer eff.}}{100} \right) \left[1 - \left(\frac{\text{Capture eff.}}{100} \right) \left(\frac{\text{Control eff.}}{100} \right) \right]$$

$$\text{Emission Rate} = (0.028)(1560) \left(1 - \frac{65}{100} \right) \left[1 - \left(\frac{100}{100} \right) \left(\frac{90}{100} \right) \right] = 1.53 \text{ lb/hr}$$

The exhaust gas rate was given by the permittee as 55,850 ACFM at a temperature of seventy-seven degrees Fahrenheit (77°F). The following conversion was made:

$$\frac{55,850 \text{ ACFM} \times 528^\circ R}{(77 + 460)^\circ R} = 54,914 \text{ SCFM}$$

SCFM = standard cubic feet per minute

ACFM = actual cubic feet per minute

The allowable PM concentration at 54,914 SCFM from Table I of 10 CSR 10-6.400 is 0.051 gr/scf (by interpolation).

$$\text{Emission Rate (grain / SCF)} = \frac{\text{Emission Rate (lb / hr)} \times 7000 (\text{grain / lb})}{\text{Exhaust gas rate (SCFM)} \times 60 (\text{min / hr})}$$

$$\text{Emission Rate (grain / SCF)} = \frac{1.53 (\text{lb / hr}) \times 7000 (\text{grain / lb})}{54,914 (\text{SCFM}) \times 60 (\text{min / hr})} = 0.0033 \text{ grain/SCF}$$

The unit is in compliance since 0.0033 grain/SCF is less than 0.051 grain/SCF.

EU0090 & EU0100

Emission Unit #SB-598-04 & SB-598-05

EIQ: CL-STC-01

Coating Line

PM emissions controlled with a fabric filter:

Maximum Design Rate = 56.25 lb/hr

0.028 tons/hr

Solids Content (%Wt) = 78

Transfer Efficiency = 65%

Control Efficiency = 90%

Exhaust Stack Temperature (T) = 77°F

Exhaust Flow Rate = 12,000 ACFM

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Potential PM Concentration:

Emission factor =

The emission factor was found from the coating with the highest percent solids by weight (78%):

$$\text{Emission Factor} = (\text{X\% solids}/100)(2000) = (78/100)(2000) = 1560 \text{ lbPM/ton}$$

PM uncontrolled emissions =

$$\frac{[(0.028 \text{ ton/hr}) \times (1560 \text{ lbs/ton}) \times (1 - .65) \times (7,000 \text{ gr/lb})]}{[(11,799 \text{ scf/min}) \times (60 \text{ min/hr})]} = 0.151 \text{ gr/scf}$$

PM controlled emissions =

$$\text{Emission Rate} = (\text{MHDR})(\text{Emission Factor}) \left(1 - \frac{\text{Transfer eff.}}{100}\right) \left[1 - \left(\frac{\text{Capture eff.}}{100}\right) \left(\frac{\text{Control eff.}}{100}\right)\right]$$

$$\text{Emission Rate} = (0.028)(1560) \left(1 - \frac{65}{100}\right) \left[1 - \left(\frac{100}{100}\right) \left(\frac{90}{100}\right)\right] = 1.53 \text{ lb/hr}$$

The exhaust gas rate was given by the permittee as 12,000 ACFM at a temperature of seventy-seven degrees Fahrenheit (77°F). The following conversion was made:

$$\frac{12,000 \text{ ACFM} \times 528^\circ\text{R}}{(77 + 460)^\circ\text{R}} = 11,799 \text{ SCFM}$$

SCFM = standard cubic feet per minute

ACFM = actual cubic feet per minute

The allowable PM concentration at 11,799 SCFM from Table I of 10 CSR 10-6.400 is 0.051 gr/scf (by interpolation).

$$\text{Emission Rate (grain/SCF)} = \frac{\text{Emission Rate (lb/hr)} \times 7000 (\text{grain/lb})}{\text{Exhaust gas rate (SCFM)} \times 60 (\text{min/hr})}$$

$$\text{Emission Rate (grain/SCF)} = \frac{1.53 (\text{lb/hr}) \times 7000 (\text{grain/lb})}{11,799 (\text{SCFM}) \times 60 (\text{min/hr})} = 0.0151 \text{ grain/SCF}$$

The unit is in compliance since 0.0151 grain/SCF is less than 0.084 grain/SCF.

Draft

EU0110

Emission Unit #SB-599-01

EIQ: CL-STC-01

Coating Line

PM emissions controlled with a fabric filter:

Maximum Design Rate = 56.25 lb/hr

0.028 tons/hr

Solids Content (%Wt) = 78

Transfer Efficiency = 65%

Control Efficiency = 90%

Exhaust Stack Temperature (T) = 77⁰F

Exhaust Flow Rate = 15,000 ACFM

Potential PM Concentration:

Emission factor =

The emission factor was found from the coating with the highest percent solids by weight (78%):

$$\text{Emission Factor} = (\text{X\% solids}/100)(2000) = (78/100)(2000) = 1560 \text{ lbPM/ton}$$

PM uncontrolled emissions =

$$\frac{[(0.028 \text{ ton/hr}) \times (1560 \text{ lbs/ton}) \times (1 - .65) \times (7,000 \text{ gr/lb})]}{[(14,749 \text{ scf/min}) \times (60 \text{ min/hr})]} = 0.121 \text{ gr/scf}$$

PM controlled emissions =

$$\text{Emission Rate} = (\text{MHDR})(\text{Emission Factor}) \left(1 - \frac{\text{Transfer eff.}}{100}\right) \left[1 - \left(\frac{\text{Capture eff.}}{100}\right) \left(\frac{\text{Control eff.}}{100}\right)\right]$$

$$\text{Emission Rate} = (0.028)(1560) \left(1 - \frac{65}{100}\right) \left[1 - \left(\frac{100}{100}\right) \left(\frac{90}{100}\right)\right] = 1.53 \text{ lb/hr}$$

The exhaust gas rate was given by the permittee as 12,000 ACFM at a temperature of seventy-seven degrees Fahrenheit (77°F). The following conversion was made:

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$$\frac{15,000 \text{ ACFM} \times 528^{\circ}R}{(77 + 460)^{\circ}R} = 14,749 \text{ SCFM}$$

SCFM = standard cubic feet per minute

ACFM = actual cubic feet per minute

The allowable PM concentration at 11,799 SCFM from Table I of 10 CSR 10-6.400 is 0.080 gr/scf (by interpolation).

$$\text{Emission Rate (grain / SCF)} = \frac{\text{Emission Rate (lb / hr)} \times 7000 (\text{grain / lb})}{\text{Exhaust gas rate (SCFM)} \times 60 (\text{min / hr})}$$

$$\text{Emission Rate (grain / SCF)} = \frac{1.53 (\text{lb / hr}) \times 7000 (\text{grain / lb})}{14,749 (\text{SCFM}) \times 60 (\text{min / hr})} = 0.0121 \text{ grain / SCF}$$

The unit is in compliance since 0.0121 grain/SCF is less than 0.080 grain/SCF.

EU0120

Emission Unit #MB-505-01

EIQ: CL-STC-01

Paint Booth (primer/topcoat)

PM emissions controlled with a fabric filter:

Maximum Design Rate = 56.25 lb/hr

0.028 tons/hr

Solids Content (%Wt) = 78

Transfer Efficiency = 65%

Control Efficiency = 90%

Exhaust Stack Temperature (T) = 77⁰F

Exhaust Flow Rate = 7,395 ACFM

Potential PM Concentration:

Emission factor =

The emission factor was found from the coating with the highest percent solids by weight (78%):

$$\text{Emission Factor} = (\text{X\% solids}/100)(2000) = (78/100)(2000) = 1560 \text{ lbPM/ton}$$

PM uncontrolled emissions =

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$$\frac{[(0.028 \text{ ton/hr}) \times (1560 \text{ lbs/ton}) \times (1 - .65) \times (7,000 \text{ gr/lb})]}{[(7,271 \text{ scf/min}) \times (60 \text{ min/hr})]} = 0.245 \text{ gr/scf}$$

PM controlled emissions =

$$\text{Emission Rate} = (\text{MHDR})(\text{Emission Factor}) \left(1 - \frac{\text{Transfer eff.}}{100}\right) \left[1 - \left(\frac{\text{Capture eff.}}{100}\right) \left(\frac{\text{Control eff.}}{100}\right)\right]$$

$$\text{Emission Rate} = (0.028)(1560) \left(1 - \frac{65}{100}\right) \left[1 - \left(\frac{100}{100}\right) \left(\frac{90}{100}\right)\right] = 1.53 \text{ lb/hr}$$

The exhaust gas rate was given by the permittee as 12,000 ACFM at a temperature of seventy-seven degrees Fahrenheit (77°F). The following conversion was made:

$$\frac{7,395 \text{ ACFM} \times 528^\circ \text{R}}{(77 + 460)^\circ \text{R}} = 7,271 \text{ SCFM}$$

SCFM = standard cubic feet per minute

ACFM = actual cubic feet per minute

The allowable PM concentration at 7,271 SCFM from Table I of 10 CSR 10-6.400 is 0.0989 gr/scf (by interpolation).

$$\text{Emission Rate (grain/SCF)} = \frac{\text{Emission Rate (lb/hr)} \times 7000 (\text{grain/lb})}{\text{Exhaust gas rate (SCFM)} \times 60 (\text{min/hr})}$$

$$\text{Emission Rate (grain/SCF)} = \frac{1.53 (\text{lb/hr}) \times 7000 (\text{grain/lb})}{7,271 (\text{SCFM}) \times 60 (\text{min/hr})} = 0.0245 \text{ grain/SCF}$$

The unit is in compliance since 0.0245 grain/SCF is less than 0.0989 grain/SCF.

EU0140

Emission Unit #SB-598-06

EIQ: CL-STC-01

Bench Spray Booth

Maximum Design Rate = 4.5 lb/hr

0.00225 tons/hr

Solids Content (%Wt) = 38

Transfer Efficiency = 90%

Exhaust Stack Temperature (T) = 77°F

Exhaust Flow Rate = 278 ACFM

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Potential PM Concentration:

Emission factor =

The emission factor was found from the coating with the highest percent solids by weight (38%):

$$\text{Emission Factor} = (X\% \text{ solids}/100)(2000) = (38/100)(2000) = 760 \text{ lbPM/ton}$$

PM uncontrolled emissions =

$$\frac{[(0.00225 \text{ ton/hr}) \times (760 \text{ lbs/ton}) \times (1 - .9) \times (7,000 \text{ gr/lb})]}{[(273 \text{ scf/min}) \times (60 \text{ min/hr})]} = 0.073 \text{ gr/scf}$$

$$(0.00225 \text{ ton/hr}) \times (760 \text{ lbs/ton}) \times (1 - .9) = 0.171 \text{ lbs/hr}$$

The exhaust gas rate was given by the permittee as 278 ACFM at a temperature of seventy-seven degrees Fahrenheit (77°F). The following conversion was made:

$$\frac{278 \text{ ACFM} \times 528^\circ \text{R}}{(77 + 460)^\circ \text{R}} = 273 \text{ SCFM}$$

SCFM = standard cubic feet per minute

ACFM = actual cubic feet per minute

The allowable PM concentration at 273 SCFM from Table I of 10 CSR 10-6.400 is 0.100 gr/scf.

The unit is in compliance since 0.073 grain/SCF is less than 0.100 grain/SCF. However, the uncontrolled emission for this unit is 0.171 lbs/hour. According to 10 CSR 10-6.400 (1)(B)11, "Emission units that at a maximum design capacity have a potential to emit less than one-half (0.5) pounds per hour of particulate matter" are exempt. The transfer efficiency would have to be lower than 71 % before the uncontrolled potential would be greater than 0.5 pounds per hour.

3. 10 CSR 10-6.065, *Operating Permits*

On December 9, 2002, the Air Pollution Control Program (APCP) received a letter from the Environmental Protection Agency (EPA) Region VII requesting the APCP re-open the Title V (Part 70) Permits for McDonnell Douglas Corporation/Boeing St. Charles and McDonnell Douglas Corporation/Boeing St. Louis for cause. The re-opening for cause letter contained the issues the permits were being re-opened for cause and additional recommended permit revisions. The St. Charles installation contained one issue for re-opening for cause and ten additional recommended permit revisions. On December 23, 2002, the APCP sent a letter to EPA agreeing with the assessment of the

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operating permits as issued and proposing a schedule to re-open and revise the operating permits. The following is a summary of the issues contained in the letter from EPA Region VII and how the issues are addressed in the permit revision.

Cause for Re-Opening #1 – Emission Limitation and Reporting Provisions for Cleaning/Hand-Wipe Activities (previously permit condition I)B)1., currently permit condition EU0010-001)

EPA Region VII stated that there was no provision in 40 CFR Part 63, Subpart 63 authorized the permit condition I)B)1)a)(i)4. which relaxed the definition of compliance. The exact permit condition is stated below.

“Activities not conforming to the above housekeeping measures are deemed in compliance if corrected within 24 hours, unless they are observed on three (3) successive inspections.”
(OP1999-052)

Any occurrence of any activity not conforming to the terms and conditions specified in the permit constitutes a deviation and must be reported as an instance of non-compliance with the permit. The applicable regulation does not provide a basis for stating in the permit that a deviation must occur a specific number of times before it constitutes a violation.

The revised operating permit was developed with the Housekeeping measures that are stated under §63.744(a). The condition from OP1999-052, which stated that housekeeping measures are deemed in compliance if corrected within 24 hours unless observed on three successive inspections, was not included in the revised operating permit. The regulation gives no justification for this proposed schedule for compliance determination, therefore, the compliance determination schedule, from OP1999-052, was not incorporated into the revised operating permit. In addition, the permittee is required to follow the reporting requirements established under §63.753(b). The permittee is also required to report to the Air Pollution Control Program Enforcement section no later than ten days after any exceedance of the regulation.

Additional Recommended Permit Revision #2 – Organizational Structure and Numerical Formatting

The revised operating permit was developed with the latest operating permit template, following the standard organizational structure and numbering system for permit conditions and emission units. The revised operating permit lists the emission units with and without limitations. The revised operating permit emission unit descriptions include the control devices and the EIQ reference numbers of the control devices.

Additional Recommended Permit Revision #3 – Enforceability Status of State Rules

The revised operating permit has updated the references to the enforceability status of state rules, which were revised in the State Implementation Plan.

Additional Recommended Permit Revision #4 – Paraphrasing of 40 CFR Part 63, Subpart GG

The general approach that was taken in OP1999-052 was to directly quote the applicable portions of the underlying regulatory requirements in the emission-specific permit conditions. However, in some

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instances, the regulation was paraphrased. EPA feels that paraphrasing regulatory language can inadvertently cause unintended meanings. To prevent alternative interpretations of the regulations, the best approach is to introduce the applicable regulation verbatim in the permit condition. The revised operating permit has been created with the exact wording from 40 CFR Part 63, Subpart GG. By inserting the wording from the regulation, the revised operating permit has been re-worded to avoid any confusion that could occur from misinterpretation of paraphrased language.

EPA Region VII states that clarifying language was an acceptable practice as long as the clarifying language does not relax the requirements of 40 CFR Part 63, Subpart GG. The APCP stated with respect to 40 CFR Part 63, Subpart GG, the Operating Permit Unit prefers to include rule language in the permit conditions and utilize the statement of basis to provide clarification language for the permit condition. Therefore, clarifying language regarding permit conditions, determinations of applicability and guidance has been included in the statement of basis below.

With regards to the phrase "(such as plastic bags, dome top cans or step cans with the lids down) before leaving their work area." The parenthetical phrase has been removed from the permit condition and the clarifying language regarding the common types of containers is included in the statement of basis.

With regards to the phrase "before leaving their work area", the permit condition has been modified to the original rule language:

"Place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers upon completing their use..."

The main goals of work practice standards are to minimize HAP emissions during normal operating procedures. When an operator is cleaning the entire aircraft and is utilizing only one applicator during the entire 8 hour period, it would be an effective work practice standard to interpret "upon completing their use" to be the end of the shift. When an operator is cleaning a series of parts in quick succession and is utilizing only one applicator during the cleaning of the parts, it would be an effective work practice standard to interpret "upon completing their use" to be the end of the successive cleaning of the parts.

With regards to the phrase "(such as flip-top or squirt bottles with small openings, safety cans or drums with closed bungs)" the APCP understands and appreciates both Boeing and EPA's comments. However, the APCP agrees with the removal of the phrase from the permit condition. The 1998 Q and A document for the Aerospace NESHAP does contain a reference to flip-top or squirt bottles with small openings. However, in March 2001, the Q and A document for the Aerospace NESHAP was amended to revise the answer to question 38 to the following:

Question #38: What is the definition of "closed container" in the cleaning provisions?

Answer #38: The rule does not provide a definition for "closed container," but does say (§63.744(a)(1)) that bags and containers should be kept closed at all times except when depositing or removing materials from the container. Also, bags or containers should be designed so as to contain the vapors of the cleaning solvent. This is not interpreted to mean that the

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container should be tested to be emission-free. Common sense would indicate that a close-fitting lid or closure device should be on the container, and that the container should be kept shut when not in use. For example, if a lid is purposely propped open, that would not be considered a closed container, however, if a lid inadvertently has a small gap in the "closed" position, that would constitute a closed container. Again this is subject to the permitting authorities discretion, and it would be best to discuss any possible concerns with them.

Therefore, based on the updated Q and A document and discussions with EPA Regions VII and IX, neither a flip-top container nor squirt top bottles with small openings are closed containers. For the flip-top container to be considered closed, the flip-top lid needs to be flush with the rest of the lid. In regards to the squirt top bottles, a squirt top bottle that contains a cap is not considered closed unless the cap is on top of the nozzle. In regards to a squirt top bottle with a floating ball closure, the squirt top bottle is considered closed if the floating ball is operating properly. The flip-top and squirt bottle closures may contain inadvertent openings when the flip-top cannot be made flush with the lid due to physical limitations of the cap or flip-top. The squirt bottle closures may contain inadvertent opening when the floating ball is operating properly, but due to physical design is not flush with the base of the nozzle.

Additional Recommended Permit Revision #5 – Monitoring/Record keeping for 40 CFR §63.751(a) (previously permit condition I)C)1), currently permit condition EU0020-001 through EU0030-001) In OP1999-052 permit condition I)C)b)ii states, under Record Keeping Requirements, that an owner of an enclosed spray gun cleaner shall visually inspect the seals and all other potential sources of leaks at least once per month (§63.751(a)). This requirement should be included under the Monitoring section of the permit condition. In the revised operating permit, this requirement of 40 CFR Part 63, Subpart GG has been moved from the Record Keeping section to the Monitoring section. The revised operating permit still requires the installation to maintain a record of all leaks and to also maintain the following parameters for each leak:

1. Source identification
2. Date leak was discovered
3. Date leak was repaired

Attachment H was included as an example Record Keeping form that could be used to fulfill these requirements. The requirements for §63.752(b)(1) have also been included in the revised operating permit. This regulation requires the installation to document the name, vapor pressure, and HAP constituents of each cleaning solvent. Attachment G was included as an example Record Keeping form that could be used to fulfill these requirements.

Additional Recommended Permit Revision #6 – Spray Gun Permit Condition and 63.753(b)(iii) and (iv) (previously permit condition I)C)1), currently permit condition EU0020-001 through EU0030-001) The regulations for §63.753(b)(iii) and (iv) have been incorporated into the reporting section of the permit condition. The regulation §63.753(b)(iii) requires the reporting of any instance of when a

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noncompliance spray gun cleaning is used, and §63.753(b)(iv) requires the reporting any instance where a leaking enclosed spray gun cleaner remains unrepaired and in use for more than fifteen days. EPA suggested that a sample reporting form be included in the revised operating permit. However, the agency felt that since both of those instances are required to be reported in the semi-annual report a new reporting form was not necessary. If there were leaking spray gun cleaners, the permittee would also be required to report to the agency within ten days.

Additional Recommended Permit Revision #7 – General Requirements and Severability Clause

The revised operating permit has been updated with the latest operating permit template. This includes the revisions to the Severability Clause.

Additional Recommended Permit Revision #8 – Documents Incorporated By Reference

The operating permit revision moves the construction permits utilized in drafting the operating permit from the reference documents in the Statement of Basis to the Documents Incorporated By Reference section of the Operating Permit. The Boeing Corporation has requested a clarification of the incorporation by reference of the Construction Permits.

When a Construction Permit is incorporated into the Operating Permit, all aspects of the Construction Permit relating to emissions are to be maintained for an installation to be in compliance. According to 10 CSR 10-6.060, *Construction Permits Required* the Construction Permit consists of both the issued permit and Construction Permit application.

10 CSR 10-6.060 (6)(E)3. – “Any owner or operator who constructs, modifies or operates an installation not in accordance with the application submitted and the permit issued, including any terms and conditions made a part of the permit, or any owner or operator of an installation who commences construction or modification after May 13, 1982, without meeting the requirements of this rule, is in violation of this rule;”

Any installation that does not comply with the issued permit and Construction Permit application as it relates to emissions would be considered to be in violation of 10 CSR 10-6.060.

The Construction Permit application consists of numerous parameters that are not included in either the Construction Permit or the Operating Permit. Some examples of the criteria necessary for the application are site information; descriptions; plans; control efficiencies; flow parameters; design specifications; and drawings showing the design of the installation, the nature and amount of emission of each pollutant, and the manner in which emission units will be operated and controlled. These values submitted in the Construction Permit application define the criteria the regulatory agencies use to evaluate potential emissions and determine the ambient air quality of the surrounding area. It is essential the installation operate and construct the emission units according to the criteria related to emissions in the Construction Permit application, since the criteria are the basis behind the limitations established in the Construction Permit. If any of the parameters relating to emissions should change, the installation would be required to request and obtain a modification to their Construction Permit.

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While an installation must adhere to their Construction Permit application, it is not necessary for the installation to certify and monitor each application parameter to show compliance. The installation is only required to monitor those parameters defined in specific State or Federal requirements or identified as Special Conditions in the Construction Permit. When construction permits are placed in Plant-wide and Emission Unit permit conditions in the Operating Permit, the installation is required to certify compliance with the parameters (monitoring, performance testing, record keeping and reporting) identified in the Plant-wide and Emission Unit permit conditions of the Operating Permit. However, the various parameters detailed in the Construction Permit application are still applicable to the installation, even though the criteria are not specifically listed in the Operating Permit. Since the entire Construction Permit is not integrated into the Operating Permit, it is necessary to establish that the installation is to operate according to the entire issued Construction Permit and Construction Permit application. To accomplish this action, it is essential for the agency to incorporate the documents by reference. When incorporating documents by reference, the agency does not intend for the installation to monitor each criteria, but rather for the installation to realize they are required to construct and operate within the boundaries submitted in the Construction Permit application as well as the issued Construction Permit.

Additional Recommended Permit Revision #9 – Coating Lines-Spray Booth Permit Condition regarding Construction Permit #0396-022 (previously permit condition E)1)a), currently permit conditions EU0060-001 through EU0110-001)

The permit condition from Construction Permit #0396-022 has been revised to clarify which units, with their respective emission unit numbers, are affected. Attachment E, from Construction Permit 0396-022, has also been included in the revised operating permit.

Additional Recommended Permit Revision #10 – Pressure Drop Readings for 40 CFR §63.745(g)(previously permit condition I)E)2), currently permit condition EU0060-002 through EU0110-002)

The specific requirements from 40 CFR §63.745(g) were included and cited in the revised operating permit. This was done to ensure that there would not be a misinterpretation of the regulation. The numeric range of acceptability for the pressure drop readings have also been included into the revised permit. A valid pressure drop record is one that has been recorded either manually or electronically, but does not include a value extrapolated later based on partially recorded data. Boeing has an electronic pressure-drop reading and recording system, which in "infrequent circumstances" may not retain a pressure-drop value. The fact that Boeing characterizes that this occurs only infrequently suggests that it is not necessary to attempt to provide additional detail regarding the recording and reporting of this data. An explanation of the occurrence of any missing data coupled with the extrapolated values where appropriate would appropriately be included with deviation and compliance reports submitted to MDNR and EPA.

Additional Recommended Permit Revision #11 – Applicable Requirements for Primers and Topcoats regarding 40 CFR §63.752(c)(1) and §63.752(c)(3) (previously permit condition I)E)2), currently permit

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condition EU0060-002 through EU0110-002)

The exact regulatory languages for 40 CFR §63.752(c)(1) and 40 CFR §63.752(c)(3) have been insert into the revised operating permit. EPA believed that OP199-052 misquoted these regulations, and that the regulation could be misinterpreted. By inserting the exact language, the regulation will be implemented as intended.

4. 10 CSR 10-5.330, *Control of Emissions from Industrial Surface Coating Operations*

The installation is no longer subject to 10 CSR10-5.330, *Control of Emissions from Industrial Surface Coating Operations*, since the effective date of the last amendment to this rule (January 31, 2001). The public hearing for the last amendment was held on August 31, 2000. The purpose statement for the proposed amendment that was filed with the Secretary of State's office (also included in the August 31, 2000 MACC briefing document) states that "the purpose of this rulemaking (amendment) is to remove the aerospace restrictions from this rule, and therefore, avoid duplicate coverage with 10 CSR 10-5.295." In addition, changes to the rule language included the removal of VOC emission limits for Aerospace Assembly and Components for primer, topcoat, and maskant from Table B in subsection (4)(B).

In summary, Boeing's St. Charles facility is subject to 10 CSR 10-5.295, *Control of Emissions from Aerospace Manufacture and Rework Facilities*, but is no longer subject to 10 CSR 10-5.330.

5. 10 CSR 10-5.300, *Control of Emissions from Solvent Cleaning*

Emission unit EU0020 performs cold cleaning of electronic components. The cleaning of electronic equipment exempts certain parts of this rule, under 10 CSR 10-5.300 (3)D(II). Therefore, (3)(B)1.A(I) and (3)(B)1.B(I) of this rule does not apply to this emission unit. (3)(B)1.A(I) states that after September 30, 1998, the permittee shall not use a cold cleaner with a vapor pressure greater than 2.0 millimeters of Mercury at twenty degrees Celsius. (3)(B)1.B(I) states that after April 1, 2001, the permittee shall not use a cold cleaning solvent with a vapor pressure greater than 1.0 millimeter of Mercury at twenty degrees Celsius. These two regulations are not applicable to the installation.

6. Through correspondence with the installation, it was determined that CC-598-02 and CC-598-03 no longer exist. These emission units have been removed from the Operating Permit. These emission units have been replaced by CC-505-01, which is now EU0020. Construction Permit #0396-014 had special conditions that applied to these units. The Construction Permit now applies to EU0020, and so it has been kept in the Operating Permit.
7. In a letter dated March 20, 2002, the installation notified the agency to the addition of an abrasive media blaster. The emission unit is controlled by a baghouse and the only emissions from the unit is particulate matter. The emission of total particulate is less than 50 lbs/year. The agency determined that the unit was not subject to any requirements under Title IV of the Clean Air Act and was also not a Title I modification. Therefore, this unit has not been included into the Operating Permit
8. 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*
In OP1999-052, this rule had not been applied to the Coating Ovens (EU0380 through EU0400). This rule has been included with the applicable requirements.

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9. Ovens OV-598-03, OV-598-04, and OV-598-05 no longer exist at the installation. They were originally included in OP1999-052, but have since been removed from this permit.
10. EU0350 was included in OP1999-052 with the regulation 10 CSR 10-5.443, *Control of Gasoline Reid Vapor Pressure*. This regulation has since been rescinded. 40 CFR Part 60, Subpart Kb does not apply to this unit since the capacity of the unit is 500 gallons. For Subpart Kb to apply, the unit must have been constructed, reconstructed, or modified after June 11, 1973 and have a capacity over 10,600 gallons. Since there are not any regulations that apply this emission unit, the units have been removed from the Operating Permit.
11. 40 CFR Part 64, *Compliance Assurance Monitoring*
In correspondence to the agency, the installation indicated on February 11, 2002 that the installation does not have any emission units that would be subject to Compliance Assurance Monitoring (CAM). Since there are not any units to which CAM applies, the installation was not required to submit a CAM plan to the agency.
12. 10 CSR 10-6.065, *Operating Permits*
On March 14, 2003 the installation indicated to the Air Pollution Control Program that following units, listed in the table below, had been removed from the premises. The units were in the draft Operating Permit and were assigned emission unit numbers, but since these units have been removed, the units have been deleted from the body of the Operating Permit. If the installation chooses in the future to re-install these units, the installation would be required to first submit a Construction Permit application and also submit for an Operating Permit Modification.

Emission Unit ID	Installation ID	EIQ Reference	Emission Unit Name
EU0130	SB-598-08	CL-STC-01	Mixing Touch-UP Paint Booth
EU0150	SB-598-07	CL-STC-01	Bench Spray Booth
EU0160	CS-STC-01A	SC-STC-01	Combustion Source
EU0250	EG-STC-01	None	Emergency Generator
EU0270	EG-509-01	None	Emergency Generator
EU0400	SB-598-09	CL-STC-01	Drying Rack
EU0550	None	None	Ink Stamping Process
EU0560	None	None	Conformal Coating Process
EU0570	None	None	Smoldering Process

13. 10 CSR 10-5.295, *Control of Emissions from Aerospace Manufacture and Rework Facilities*
Emission Units EU0060 through EU0120 and EU0140 are equipped with control equipment (fabric filters). However, the fabric filters are only used to control emissions of particulate matter. The requirement of 10 CSR 10-5.295 (4)(A) is that the permittee should submit a monitoring plan to ensure ongoing compliance with (3)(B)(3) of 10 CSR 10-5.295. The requirement of (3)(B)(3) is that control equipment should have a VOC reduction efficiency of 81% or greater. The control equipment installed

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by the installation is not utilized for VOC emissions, only particulate emissions. The installation complies with the VOC emission limits of 10 CSR 10-5.295 by the use of compliant coatings. Since the installation does not use control equipment to comply with the VOC limits, the monitoring plan from 10 CSR 10-5.295 (4)(A) is not required. The condition requiring the monitoring plan has been removed from the Monitoring section. If the installation were to ever use control equipment to meet the applicable VOC limits, the installation would be required to submit a monitoring plan, for approval, to the Air Pollution Control Program.

14. 10 CSR 10-6.400, *Restriction of Particulate Matter from Industrial Processes*

For the installation to be able to demonstrate compliance with the emission limitation for EU0060-EU0120, the installation must conduct monitoring of the control device. The Inorganic HAP Monitoring and Record Keeping requirements for Permit Condition (EU0060 through EU0120)-002 contain control device monitoring of the pressure drop from 40 CFR Part 63, Subpart GG. Therefore, the emission units will utilize the monitoring/record keeping from EU0060-EU0120-002 for the monitoring of the control device.

15. 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*

The installation was already following a Monitoring schedule from the OP1999-052. The installation is currently on the step requiring monthly observations from the previous permit. The installation shall continue the monitoring schedule from the previous Operating Permit, which would require monthly observations. However, if any exceedance of this regulation should occur, the installation would be required to revert to new schedule that is contained in the revised Operating Permit.

16. 10 CSR 10-6.065, *Operating Permits*

In the original draft of the Title V permit for Boeing, Permit Conditions PW004 and PW005 were labeled as Permit Conditions EU0010-001 and EU0580-01, respectively. However, the installation indicated in a letter, dated May 23, 2003, that the activities associated with these emission units are performed in numerous buildings and that the installation would prefer to have them as plant-wide conditions in case the operations move. These conditions have been moved to the "Plant Wide Emission Limitation" section of the operating permit. The emission units have not been renumbered and therefore, there is no EU0010 or EU0580.

17. 10 CSR 10-6.065, *Operating Permits*

According to 10 CSR 10-6.065(6)(C)1.C.(III)(d),

"(III) With respect to reporting, the permit shall incorporate all applicable reporting requirements and require the following:

(d) Every report submitted shall be certified by a responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation; and"

Therefore, the Air Pollution Control Program states that the reporting requirements identified in the permit conditions of the operating permit shall be certified by the responsible official.

18. 10 CSR 10-6.065, *Operating Permits*

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The permittee requested that the exemptions from 10 CSR 10-5.295, 10 CSR 10-6.220, and 40 CFR Part 63, Subpart GG to be listed in the operating permit. These exemptions have been listed in the General Permit Requirements section under the Permit Shield subsection. In an effort to keep the operating permit concise, these exemptions have been listed once under the General Permit Requirements section, instead of being included for each applicable permit condition.

Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one (1) or more of the following reasons:

1. The specific pollutant regulated by that rule is not emitted by the installation;
2. The installation is not in the source category regulated by that rule;
3. The installation is not in the county or specific area that is regulated under the authority of that rule;
4. The installation does not contain the type of emission unit which is regulated by that rule;
5. The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one (1) or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the APCP's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the APCP a schedule for achieving compliance for that regulation(s).

Prepared by:

Amish B. Daftari
Environmental Engineer

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John J. Van Gels, Vice President General Manager Production Operation and General Services
McDonnell Douglas Corporation, a wholly-owned subsidiary
of The Boeing Company (hereafter "Boeing")
P.O. Box 516 MC S221-1400
St. Louis, MO 63166-0516,

Re: McDonnell Douglas Corporation, a wholly-owned subsidiary
of The Boeing Company (hereafter "Boeing"), 183-0010
Permit Number:

Dear Sir/Madam:

Enclosed with this letter is your operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

If you have any questions or need additional information regarding this permit, please contact the Air Pollution Control Program (APCP) at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Randy E. Raymond
Permit Section Chief

RER:n

Enclosures

c: US EPA Region VII
St. LouisSt. LouisSt. Louis Regional Office
PAMS File: 2002-12-050

Draft

Yvonne Pierce
McDonnell Douglas Corporation, a wholly-owned subsidiary
of The Boeing Company (hereafter "Boeing")
P.O. Box 516 MC S221-1400
St. Louis, MO 63166-0516
Re: Draft Title V Operating Permit – Project No.: Pams No

CERTIFIED MAIL:

RETURN RECEIPT REQUESTED

Dear Contact's Last Name:

The Air Pollution Control Program (APCP) has completed the preliminary review of your Title V permit application. A public notice will be placed in the Name of the Newspaper on date.

The APCP will accept comments regarding the draft permit that are postmarked on or before the closing date. It is very important that you read and understand this legal document. You will be held responsible for complying with this document.

Please address comments or recommendations for changes to my attention at:

Operating Permits Unit
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102

A copy of this draft has also been sent to the U.S. EPA's Region VII office in Kansas City for their review. The Region VII office is afforded, by law, oversight authority on any Title V permit which Missouri (or any of the other states in the region) may propose to issue. A public hearing may be held if interest is expressed by the public.

Should you have any questions, or wish clarification on any items in this draft permit, please feel free to contact me at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Environmental Engineer

n/clerical initials

Enclosures

c: PAMS File: 2002-12-050

Draft

Designate affected state(s). clerical will add appropriate address and director's name: Affected State Address

RE: Affected States Review – Notification of Proposed Final Part 70 Operating Permit

Dear Mr. {Director's Name}:

In accordance with Missouri State Rule 10 CSR 10-6.065(6)(F)1. and the Clean Air Act this letter is to notify you of public notice of the preliminary draft and request for comments for:

McDonnell Douglas Corporation, a wholly-owned subsidiary
of The Boeing Company (hereafter "Boeing"), St. Louis, MO 63166-0516
Project Number - 2002-12-050

Public notice will be published in the newspaper published in, city, on date.

You are invited to submit any relevant information, materials, and views in support of or in opposition to the draft operating permits in writing by no later than date + 30 to my attention at Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Should you require further information or documentation on this matter, please contact the Operating Permits Unit at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. Thank you for your time and attention.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Randy E. Raymond
Permit Section Chief

RER:n ct first initial

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¹ 10 CSR 10-6.260(4) is state-only.

² 10 CSR 10-6.260(4) is state-only.

³ 10 CSR 10-6.260(4) is state-only.

⁴ 10 CSR 10-6.260(4) is state-only.

⁵ 10 CSR 10-6.260(4) is state-only.

⁶ 10 CSR 10-6.260(4) is state-only.